

DACA85-03-R-0033

PROPOSAL DOCUMENTS

SECURITY FORCES COMPLEX

EIELSON AFB, ALASKA

**SOLICITATION, OFFER, AND AWARD
SUPPLIES OR SERVICES AND PRICE/COSTS
CONSTRUCTION SPECIFICATIONS/STATEMENT OF WORK
INSPECTION AND ACCEPTANCE
SPECIAL CONTRACT REQUIREMENTS
CONTRACT CLAUSES
LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS
INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS
EVALUATION FACTORS FOR AWARD**

NOVEMBER, 2003



**U.S. ARMY ENGINEER DISTRICT, ALASKA
CORPS OF ENGINEERS
P.O. BOX 6898
ELMENDORF AFB, ALASKA 99506-6898**



INCREASE PROFIT



SUBMIT VE CHANGES

DESIGN AUTHENTICATION

Signatures affixed below indicate the drawings and specifications included in this solicitation were prepared, reviewed, and certified in accordance with ER 1110-345-100, Design Policy for Military Construction.

Solicitation: DACA85-03-R-0033

UPC: EIE183

Project Title: SECURITY FORCES COMPLEX

Location: EIELSON AFB, AK



OLTON SWANSON, P.E.
Chief, Engineering Division

5 Nov 2003

Date



LAURA A. WALKER, P.E.
Chief, Military Technical Engineering Branch

This project was designed by the Alaska District of the U.S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by ER 1110-1-8152.

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NUMBER	2. TYPE OF SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
	DACA85-02-R-0033	<input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	20 Nov 03	
IMPORTANT - The "offer" section on the reverse must be fully completed by the offeror.				
4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER		
7. ISSUED BY	CODE	8. ADDRESS OFFER TO		
US ARMY ENGINEER DISTRICT, ALASKA CEPOA-CT (DACA85) PO BOX 6898 ANCHORAGE, AK 99506-6898		US Army Engineer District, Alaska 2204 3rd Street Elmendorf AFB, Alaska 99506 Mailing: PO Box 6898 Anchorage, AK 99506-6898		
9. FOR INFORMATION CALL	A. NAME JUNE L WOHLBACH		B. TELEPHONE NUMBER <i>(Include area code) (NO COLLECT CALLS)</i> (907)753-5624 / email june.l.wohlbach@usace.army.mil	

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, identifying number, date):*

NAICS: 236210 - Industrial Building Design/Construct

PROJECT TITLE/LOCATION: Design/Construct Joint Security Forces Complex, Eielson AFB, Alaska

OPEN TO LARGE AND SMALL BUSINESSES

DESCRIPTION OF WORK: This will be a design/construct contract. The proposed new facility will combine the security forces operations for the 168th Air National Guard and 354th Active Duty in one consolidated facility. Functional areas include: vehicle bay, mobility supply, armory, command and control, classrooms, weapons training rooms, offices, etc. Responders are advised that the requirements may be delayed, cancelled or revised at any time during the solicitation, selection, evaluation, negotiation, and/or final award process based on decisions related to DOD changes and disposition of the Armed Services. The solicitation will be provided free of charge electronically through our website: <https://ebs.poa.usace.army.mil/AdvertisedSolicitations.asp>

11. The Contractor shall begin performance within 10 calendar days and complete it within _____ calendar days after receiving

☐ award,
 ☒ notice to proceed. This performance period is
 ☒ mandatory,
 ☐ negotiable. (See SCR-1 (also calendar days) .)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE PAYMENT BONDS?
(If "YES," indicate within how many calendar days after award in Item 12B.)

☒ YES
 ☐ NO

12B. CALENDAR DAYS

10

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and **See Section 00100, Para III General Requirements copies to perform the work required are due at the place specified in Item 8 by 2:00 PM (hour) local time 12 Jan 04 (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee ☒ is, ☐ is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)

15. TELEPHONE NUMBER (Include area code)

16. REMITTANCE ADDRESS (Include only if different than Item 14)

CODE

FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. (Insert any number equal or greater than the minimum requirement stated in 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

AMOUNTS 

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGEMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

AMENDMENT NO.

DATE

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)

20B. SIGNATURE

20C. OFFER DATE

AWARD (To be completed by Government)

21. ITEMS ACCEPTED

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN
(4 copies unless otherwise specified)ITEM 

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO

☐ 10 U.S.C. 2304(c) ()☐ 41 U.S.C. 253(c) ()

26. ADMINISTERED BY

CODE

27. PAYMENT WILL BE MADE BY

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 28. NEGOTIATED AGREEMENT (Contractor is required to sign this

document and return _____ copies to the issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.

☐ 29. AWARD. (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN
(Type or print)

31A. NAME OF CONTRACTING OFFICER (Type or print)

30B. SIGNATURE

30C. DATE

31B. UNITED STATES OF AMERICA

31C. AWARD DATE

BY

!!! CAUTION TO OFFERORS !!!

1. **BUSINESS HOURS:** For the Alaska District Corps of Engineers is from 7:30 A.M. to 4:00 P.M., Monday through Friday.
2. **SUBMIT PROPOSALS:** To deliver proposals to the US Army Corp of Engineers, 2204 Third St, Elmendorf AFB, AK, you will need to submit a request for a base pass 48 hours prior to proposal due date (See Section 00100 for additional instructions). Proposals will be delivered to security desk and Contracting personnel notified to pick-up. Please be sure to submit proposals by the time specified on Standard Form 1442, Block 13-A. Any bids received after the specified time will not be accepted.
3. **VISITORS TO ELMENDORF AFB: ***NOTE: BE ADVISED THAT DUE TO BASE SECURITY MEASURES, YOU WILL NEED EXTRA TIME TO PROCESS THROUGH BONIFACE GATE.** You are required to have the following to obtain a base pass: current Anchorage emissions control inspection certificate, driver's license, DOD ID card (if applicable), proof of insurance, Alaska vehicle registration and Contracting Division point of contact/telephone number.
4. **AMENDMENTS:** Have you acknowledge receipt of **ALL** amendments? If in doubt as to the number of amendments issued, please contact our office, (907)753-2545 or (907)753-2553. SEE SECTION 00100 FOR ADDITIONAL INFORMATION REGARDING AMENDMENTS.
5. **AMENDED PROPOSAL PAGES:** If any of the amendments furnished amended proposal pages, **the amended pages must be used** in submitting your proposals.
6. **OFFER GUARANTEE:** Sufficient offer guarantee in proper form (SF 24) must be furnished **with your proposal**. (FOR JOBS EXCEEDING \$25,000)
7. **MISTAKE IN PROPOSAL:** Have you reviewed your proposal price for possible errors in calculation or work left out?
8. **TELEGRAPHIC MODIFICATIONS:** THE ALASKA DISTRICT DOES NOT HAVE THE CAPABILITY OF RECEIVING COMMERCIAL TELEGRAMS DIRECTLY. Offerors who wish to modify their offer by telegram are urged to ensure that telegrams are submitted within enough time to arrive at the offer depository room prior to the time specified for bid opening. (SEE STANDARD FORM 1442, BLOCK 13-A FOR SPECIFIC PROPOSAL DUE TIME). Any doubt as to time should be resolved in favor of **EXTRA TIME**. Transmission by Fax to this office is **NOT ACCEPTABLE**.
9. **OFFER ACCEPTANCE PERIOD:** The minimum OFFER acceptance period is specified in Block 13D of the Standard Form 1442, Solicitation, Offer and Award. Please ensure that you allow at least the stated number of calendar days for the Government to accept your proposal.
10. **WEB-SITE:** If you have access to the Internet, updated project listing and planholder lists are available at <https://ebs.poa.usace.army.mil/AdvertisedSolicitations.asp>

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RETURN THE FOLLOWING WITH YOUR BID:

Section 00010 - Completed
Section 00600 - Completed
20% Bid Bond

PROPOSAL SCHEDULE
SECURITY FORCES COMPLEX

DACA85-03-R-0033

EIELSON AFB, ALASKA

<u>Item</u> <u>No.</u>	<u>Description</u>	<u>Estimated</u> <u>Quantity</u>	<u>Unit</u>	<u>Unit</u> <u>Price</u>	<u>Amount</u>
BASE ITEMS					
0001.	Design Security Forces Complex, complete	1	Lump sum	\$ _____	\$ _____
0002.	Construct Security Forces Complex within the building 1.5 meter lines, complete.	1	Lump sum	\$ _____	\$ _____
0003.	Construct site work and utilities beyond the building 1.5 meter lines, complete.	1	Lump sum	\$ _____	\$ _____
Total of Items 0001 thru 0003					\$ _____
OPTIONAL ITEMS					
0004.	Radiant floor heat in both Mobility Bays and Parking Garage, complete.	1	Lump sum	\$ _____	\$ _____
0005.	Pallet racks in AD Mobility Bay, complete.	1	Lump sum	\$ _____	\$ _____
0006.	Demolition of three separate Buildings, complete.	1	Lump sum	\$ _____	\$ _____
0007.	Ceiling fans (50) at offices, breakrooms and other identified locations, complete.	1	Lump sum	\$ _____	\$ _____
0008.	Six CC TV cameras and 2 monitors, complete.	1	Lump sum	\$ _____	\$ _____
Total of Optional Items 0004 thru 0008					\$ _____
Total of Base and Optional Items (0001 thru 0008)					\$ _____

EVALUATION OF OFFERS:

1. AWARD: Award will be made in accordance with Section 00120 - Evaluation Factors for Award.

2. INCOMPLETE OFFERS: Failure to submit an offer on all items in the schedule will result in an incomplete offer and the proposal will be rejected. Lump Sum or unit prices must be shown for each item within the schedule.

3. EVALUATION OF OPTIONS: (JUN 88). The Government will evaluate offers for price purpose by adding the total price of all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the options.

4. SPECIAL OFFER CONDITION: If a modification to an offer based on unit prices is submitted which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment to each unit price in the proposal schedule must be stated. If it is not stated, the offeror agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit proposal schedule.

-- End of Proposal Schedule --

If the offer is submitted by a corporation, partnership, Joint Venture or an LLC, the applicable form listed must be completed. In the alternative, other evidence must be submitted to substantiate the authority of the person signing the offer. If a corporation, the same officer shall not execute both the offer and the certificate.

LLC

I, _____, certify that I am the _____ Secretary of the LLC named as Offeror/Contractor herein; that _____ who signed this offer/contract on behalf of the Offeror/Contractor was then _____ of said LLC; that said offer/contract was duly signed for and on behalf of said LLC by authority of its governing body, and is within the scope of its corporate powers.

(Secretary) (CORPORATE SEAL)

CORPORATE CERTIFICATE

I, _____, certify that I am the _____ Secretary of the corporation named as Offeror/Contractor herein; that _____ who signed this offer/contract on behalf of the Offeror/Contractor was then _____ of said corporation; that said offer/contract was duly signed for and on behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

(Secretary) (CORPORATE SEAL)

AUTHORITY TO BIND PARTNERSHIP

This is to certify that the names and signatures of all partners are listed below and that the person signing the offer had authority to actually bind the partnership pursuant to its partnership agreement. Each of the partners individually has full authority to enter into and execute contractual instruments, on behalf of said partnership, with the United States of America, except as follows: (State "none" or describe limitations, if any.)

This authority shall remain in full force and effect until such time as the revocation of authority by any cause whatsoever has been furnished in writing to, and acknowledged by, the Contracting Officer.

(Type or Print Name)

(Signature)

PROPOSAL NO. DACA85-03-R-0033

JOINT VENTURE

I, _____, certify that I am the Secretary of the Corporation named as Offeror/Contractor Herein, that who signed this offer/contract on behalf of the Offeror/Contractor was then _____ of said corporation by authority of its governing body and is within the scope of its corporate powers. IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of said corporation this _____ day of

AFFIX CORPORATE SEAL

(Secretary)

JOINT VENTURE

I, _____, certify that I am the Secretary of the corporation names as Offeror/Contractor herein, that who signed this offer/contract on behalf of the Offeror/Contractor was then _____ of said corporation; that said offer/contract was duly signed for and on behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of said corporation this _____ day of _____.

AFFIX CORPORATE SEAL

(Secretary)

PRE-AWARD QUESTIONNAIRE

Following offer opening, the apparent low offeror will be contacted and requested to submit the data referenced below. This will expedite our pre-award process. Prior to awarding any contract, it is required for this office to have on record specific information concerning the apparent low, responsible, responsive offeror. Accordingly it is requested that you complete the following form and return to this office, ATTN: Contracting Division, CEPOA-CT-SP.

Name of Contractor _____ X Proper Block

Business Address _____ Corporation

City/State/Zip _____ Partnership

Telephone No. _____ Individual

Operating Office Address, (This Area): _____ J/V

_____ LLC

Name of Contractor _____

Business Address _____ inc. in State of:

City/State/Zip _____

Telephone No. _____

Year inc.

LIST OF CORPORATION OFFICERS/PARTNERS BY NAME AND TITLE

_____ Small Business

_____ Large Business

_____ Minority Business

YEARS EXPERIENCE in the field of proposed work (_____).

Also indicate similarity between work currently being produced and work required under subject invitation:

Financial Institution Ratings. Is your firm listed in:

a. Dun & Bradstreet: _____ No _____ Yes: If yes, what is the rating?

b. Thomas Register: _____ No _____ Yes: If yes, what is the rating?

CERTIFIED CURRENT BALANCE SHEET and latest PROFIT AND LOSS STATEMENT signed by an officer of the company. The name of your banking firm and telephone number and the name of the individual to contact for a line-of-credit reference. The last financial statements will be acceptable if they are less than 6 months old.

PROPOSAL NO. DACA85-03-R-0033

List all pending lawsuits or unsatisfied judgments against you; the nature of same and Court where filed or adjudicated. Lawsuits or judgments where full payment will be made, or are covered by your insurance are not to be included.

List all your contract claims pending; state nature and amount of each claim and approximate date filed.

Name(s) of Bonding Company(ies) _____

Business Address(es) _____

Your bonding capacity as established by your surety \$ _____

PLEASE ATTACH with Pre-Award Questionnaire a list of tools, equipment and facilities, with year, date and value which will be used for this project.

By my signature hereon, I certify that the offer price of \$
on
subject project has been reviewed and is without error.

Signature _____

Title _____

Date _____

SECTION 00100

PROPOSAL SUBMISSION REQUIREMENTS

COST LIMITATION:

The target ceiling for contract award for design and construction of the Joint Security Forces Complex is \$14,050,000 based on funds available for this project. The Government cannot guarantee that additional funds will be available for award and under no circumstances can award be made above the statutory limit. Offerors are under no obligation to approach this ceiling.

OFFERORS ARE ALSO ADVISED THAT A CONTRACT RESULTING FROM THIS SOLICITATION IS CONTINGENT UPON CONGRESSIONAL APPROVAL. PLEASE BE ADVISED THAT SHOULD CONGRESS NOT AUTHORIZE THIS PROJECT OR APPROPRIATE THE FUNDS, THE SOLICITATION WILL BE CANCELLED. IF THE SOLICITATION IS CANCELLED, ALL PROPOSAL PREPARATION COSTS WILL BE BORNE BY THE OFFEROR. THE GOVERNMENT WILL NOT REIMBURSE OFFERORS FOR THEIR COSTS ASSOCIATED IN PREPARING THEIR PROPOSALS.

PART 1 GENERAL INFORMATION

PRELIMINARY INFORMATION

1. **REQUEST FOR PROPOSAL** The Request for Proposal (RFP) for this solicitation, including plans and specifications (if any), will be issued on CD-ROM or via other electronic means at no charge. Traditional paper copies will not be available. Prospective offerors, subcontractors and Plan rooms are required to self register their firm or office on the Internet at www.poa.usace.army.mil/contracting/default.asp. Neither telephonic mailed nor faxed requests will be accepted. Those registering are responsible for the information on the mailing list. Updated project listings and plan holders lists are available at the same website.
2. **OFFEROR GUARANTEE:** A proposal bond shall be submitted with the proposal in accordance with Section 00700, 52.228-1, Bid Guarantee (Sep 1996).
3. **SURETY REQUIREMENTS**
 - a. Corporate Sureties - Corporate sureties for bid, performance, and payment bonds must appear on the list contained in the Department of the Treasury Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies". Other requirements for corporate sureties are contained in FAR 28.202-1.
 - b. Individual Sureties - If individual sureties are used for bond obligations, they must meet the requirements under FAR 28.203.

4. INQUIRIES

Prospective offerors may submit inquiries concerning administrative and technical matters in writing to June Wohlbach, Contract Specialist, (907) 753-5624, Fax (907) 753-2544. All written inquiries should be addressed to U.S. Army Engineer District, Alaska, ATTN: June Wohlbach, CEPOA-CT-CM, P.O. Box 6898, Elmendorf AFB, AK 99506-6898. (e-mail: june.l.wohlbach@poa02.usace.army.mil)

COLLECT CALLS WILL NOT BE ACCEPTED!

6. VISITORS TO AIR FORCE BASES

All vehicle operators are required to wear seatbelts. Violators will lose their driving privileges for 10 days on their first offense, 30 days on the second offense, and 6 months or longer on the third offense.

If a firm does not have a current pass to obtain entry to either Eielson or Elmendorf AFB, the firm may request a day pass using the following procedures:

Forty-eight (48) hours prior to your meeting or delivery of proposal, the firm must contact Ms. Wohlbach at the above e-mail and request a day pass. The firm must provide:

- a. The solicitation number
- b. The names of all person(s) in the vehicle
- c. The name of their employer(s)

State that this is a request for a day pass. On the DAY OF entry, the driver must go to the Boniface gate and provide:

- a. Valid driver's license
- b. Proof of current insurance
- c. Proof of current IM certification
- d. Current vehicle registration.
- e. Please inform the security police that you are on the list for a DAY PASS.

Please allow enough time to submit your proposals due to possible changes in base access requirements for security reasons. No public telephone service is provided at the Boniface gate.

7. FACSIMILE PROPOSALS

Facsimile proposals or modifications will not be accepted.

8. PICK-UP SERVICE FOR TELEGRAPHIC AMENDMENTS

The US Army Engineers District, Alaska, does not provide pick-up service for telegraphic amendments.

9. PERFORMANCE OF WORK BY CONTRACTOR

Your attention is invited to Section 00700, 52.236-1, entitled "Performance Of Work By Contractor." Unless submitted with the proposal, the successful contractor must furnish the Contracting Officer within 30 days after award a description of the work, which he intends to perform with his own organization (e.g. earthwork, paving, brickwork, or roofing), the percentage of the total work this represents and the estimated cost thereof.

10 PRE-PROPOSAL CONFERENCE / SITE VISIT

A pre-proposal conference and site visit will be conducted on 2 Dec 03 at 1000 in building 2310 (formerly building 2258) on Eielson AFB, Alaska. Offerors wishing to attend will be required to provide their full name, social security number, company name, and telephone number to June Wohlbach, Contract Specialist, at the U.S. Army Engineer District, Alaska, at FAX (907) 753-2544 by close of business 48 hours prior. Personal and vehicle identification will be required to pass security at the gate at Eielson AFB.

Questions submitted at least two days prior to the proposal conference/site visit will be answered at the conference where feasible. Submit questions to June Wohlbach, via email or FAX (907) 753-2544. Minutes of the conference will be recorded and distributed to all contractors as an amendment to this RFP regardless of whether or not they attend the pre-proposal conference.

Offerors are encourage to attend the pre-proposal conference and familiarize themselves with site parameters and constraints.

Prospective offerors are advised to visit the work site to ascertain the degree of difficulty expected in avoiding existing features, and other factors affecting the work. Any difficulties arising during performance of work that would have been evident at such a prior inspection will not be considered to be a result of differing site conditions.

11. PRE-AWARD SURVEYS.

The Government reserves the right to conduct a pre-award survey of any firm under consideration to confirm any part of the information furnished by the offeror, or to require other evidence of managerial, financial, technical, and other capabilities, the positive establishment of which is determined by the Government to be necessary for the successful performance of the contract.

PART I. WHO MAY SUBMIT:

A. Firms formally organized as design-build entities, design firms and construction contractors that have associated specifically for this project, or any other joint venture or sub-contractor. In the latter case, a single design firm or construction contractor may offer more than one proposal by entering into more than one such association. For the purposes of this solicitation, no distinction is made between formally organized design-build entities and project-specific design-build associations. Both are referred to as the

design-build offeror (or simply "offeror") or the design-build contractor (or simply "contractor") after award of a contract.

B. Joint ventures are encouraged to apply. However, they must complete the following:

1. Obtain a Tax Identification Number (TIN) as a joint venture.
2. Prepare the Reps/Certs as a joint venture (For example, provide the TIN of the joint venture. Do not use a TIN from one of the parties of the joint venture.)
3. All parties to the joint venture must sign the proposal.

Joint ventures are advised that if they are the successful proposal, they must be registered in CCR as a joint venture. We advise they begin this process when they prepare their proposal in order to ensure this registration is in place should they be selected for the award. "Lack of registration in the CCR database will make an offeror ineligible for award." (Reference Solicitation Clause 252.204-7004, Required Central Contractor Registration)

C. PARTICIPATION OF COMMERCIAL FIRM

The following firm may provide administrative support during the source selection process. This firm will be authorized access to only those portions of the proposal data and discussions that are necessary to enable them to perform their respective duties. The firm shall be expressly prohibited from competing on the subject acquisition and from proposal rating, ranking, or recommending the selection of a source:

FIRM: Koonce Pfeffer Bettis, Incorporated

Pursuant to Federal Acquisition Regulation (FAR) 9.505-4, individuals involved in this acquisition whose duties expose them to proprietary information generated in an offeror's proposal will be required to sign a nondisclosure agreement. This agreement states that, while performing their duties related to the source selection process, they will: (1) protect the offeror's information from unauthorized use or disclosure for as long as it remains proprietary and, (2) refrain from using the information for any purpose other than that for which it was furnished.

PART II. REQUEST FOR PROPOSAL (RFP) PROCESS

a. The U.S. Army Engineer District, Alaska, intends to solicit this requirement using the source selection procedures in accordance with the provisions set forth in this Request for Proposal (RFP). The selection process used for this solicitation will be a one-step Request for Proposal (RFP) with stipend. Offerors will be required to submit relevant qualifications and overall technical approach for this project to include Experience, Past Performance, Team Organization, conceptual drawings, narratives, schedule, and price. A firm fixed price construction contract will be awarded to the offeror who submits a proposal determined to be the best value to the Government, with price and other factors considered.

- b. Those offerors who are not awarded the contract will be entitled to a portion of a stipend fee of \$110,000.00. To receive a portion of the stipend fee, the offeror must submit a proposal that meets the submittal requirements described herein, also meets the minimally acceptable design criteria set forth in Section 01010. The distribution of stipends is shown at the end of Section 00120 of this solicitation. The Government will have rights to the design submitted by each offeror in accordance with DFARS 252.227-7022 Government Rights Unlimited (March 1979).
- c. The Government may award without discussions.
- c. Limited exchanges with offerors may be conducted for clarifications. A competitive range may be established for conducting discussions.
- d. Offerors will be evaluated and selected from the following criteria:
 - Experience, to include prime contractor/design team and key subcontractors, and Past Performance
 - Team organization to include management plan, key personnel, and key subcontractors,
 - Technical Solution
 - Design Narrative/Design Drawings
 - Betterments/Innovations
 - Proposed Schedule
 - Proposed Equipment
 - Subcontracting Plan/Small Business Participation
 - Price.
- e. Each criterion will be evaluated as a discrete factor. The final determination as to the overall value of any proposal will reflect the combined effect of having considered all criteria as a whole.

PART III. GENERAL REQUIREMENTS

- a. The intent of this RFP is to solicit proposals for the design and construction of the Eielson Joint Security Forces Complex as outlined in this RFP. See section 00800 for additional information on Special Contract Requirements. The solicitation criteria relies upon industry standards, as much as possible, to allow the Offeror a degree of innovation and design flexibility while meeting minimum specific project requirements.
- b. Submit your proposal packages to the U.S. Army Engineer District, Alaska at the address shown in Block 8 of Standard Form 1442.
- c. The Government must receive your proposal no later than the time and date specified in Block 13 of Standard Form 1442. Submit your proposal in three volumes.

Volume 1 contains your organization's experience, past performance, and team characteristics.

Volume 2 shall contain your technical solution including concept design, associated narrative, schedule and proposed major equipment. Drawings submitted for this project may be incorporated into Volume 2 or enclosed as a separate set with your proposal.

Volume 3 shall contain the required pricing and proforma requirements, including the following

Standard Form (SF) 1442 Solicitation, Offer and Award
Proposal Schedule
Certificate of Corporate Principal
Section 0600, Representations and Certifications (fully executed)
Subcontractor/Teaming Member Past Performance Consent Forms

- d. Proposal clarity, organization and cross-referencing is mandatory. The offerors shall sufficiently detail and clearly define all items addressed in this Section (00100) Proposal Submission Requirements.
- e. Written portions shall be type written on 8-1/2" x 11" format with three holes punched, in three ring binders. Schedules may be presented on 11" x 17" sheets folded to 8-1/2" x 11". The offeror shall label and tab their proposal consistent with the solicitation format index below. The proposal shall have table of contents for each proposal criteria as established in this Section (00100). Each page of the proposal shall have the page number on the bottom of the page starting with the first page to the last.
- f. Provide **one** (1) original and **three** (3) copies of all drawings and Volumes 1 and 2, and **one** (1) original and **one** (1) copy of Volume 3. Provide **one** (1) copy of all CADD files using AutoCad 2000 or later version on a Compact Disk.
- g. Page limitations:
 - 1. Volume 1 is not expected to exceed 35 (thirty-five) -single sided pages. Personnel resumes and performance evaluations located in Volume 1 are **not** counted in the page limits.
 - 2. Volume 2 may be as many pages as required. Use of original product information or laser copied images is encouraged for clarity.
 - 3. Volume 3 is not expected to exceed 35 (thirty-five) pages.
- j. Offerors shall submit a list of the names and telephone numbers(s) of persons authorized to conduct negotiations in their proposals and provide a completed Certificate of Corporate Principle.

PART IV. SPECIFIC PROPOSAL REQUIREMENTS

A narrative is provided in section 01010 that demonstrates the specific technical requirements of this project.

VOLUME ONE – ORGANIZATIONAL CHARACTERISTICS

Volume one is an opportunity for you to provide information on various aspects of your design and construction team for this project. Present the material sequentially under the following Tabs, A and B, to facilitate evaluation.

TAB A: EXPERIENCE/PAST PERFORMANCE

Note: Highly relevant experience includes: design and construction of projects with similar use and function such as police and fire stations, or command and control facilities. The government will not only consider the relative similarity of a project, but how recently the project was completed and the level of customer satisfaction.

- a. Contractor Experience: Provide up to three (3) examples of projects demonstrating relevant experience and an explanation of how these projects are similar in scope and complexity to the work required in this RFP. The example projects submitted should clearly demonstrate the Offeror's ability to provide quality construction, to coordinate critical interfaces of complex systems with other entities, to meet critical time constraints, and to satisfy the customer/owner.
- b. Designer Experience: Provide up to three (3) examples of projects demonstrating relevant experience and an explanation of how these projects are similar in scope and complexity to the work required in this RFP.
- c. Team Experience: Provide up to three (3) examples of projects in which the team, or key members therein, you are proposing for this project has worked together. Identify any projects that are similar to this project. Provide an explanation of how these projects are similar in scope to the work required in this RFP.
- d. Past Performance: Provide past performance information for each project listed under Tab A – Experience. Include this information for Prime Contractor, and any key sub-contractors. The offeror may use the Past Performance Evaluation Questionnaire included at the end of this section (00100) as a means to supplement the Past Performance requirement. This is especially useful if one or both parties has limited experience with government projects or wishes to highlight specific civilian projects. The government will review all available recent and relevant past performance data in its possession. The Offeror will be responsible for submitting the Past Performance Questionnaire to its customers in a timely manner for inclusion in the proposal.

Past Performance Survey Form:

A Past Performance Survey Form is attached to facilitate the requirement of part "d" above. Surveys are not required for DOD projects having entries in CCASS or ACASS. The Government may conduct Past Performance Interviews with clients and customers, critical subcontractors', or other Points of Contact (POCs) identified in the Past Performance Surveys. Completed surveys may be included in your proposal or sent directly to the Alaska Engineer District.

U.S. Army Engineer District, Alaska
ATTN: Contracting Division (Wohlbach)
P.O. Box 6898, Elmendorf AFB, AK 99506-6898.
(907) 753-5624 or FAX (907) 753-2544
E-mail: june.l.wohlbach@poa02.usace.army.mil

TAB B: ORGANIZATION

Fully describe your proposed organization, in terms of key positions including but not limited to: Superintendent, Quality Control Manager, Designers of Record, and others to manage and execute the design, construction, training, and warranty support, with an organization chart and supporting narrative. Resumes of key personnel should include experience commensurate with this type of project. Identify the Design/Build management team and describe the role of the Design Organization during construction. Identify your procedures for quality control throughout the design and construction process. Provide the qualifications for the key personnel as listed below:

DESIGN PERSONNEL. Use separate sheets

Provide the information listed below on separate sheets for each person showing qualifications of: Design Project Manager as a minimum, and as appropriate, the Civil Engineer, Landscape Architect, Geotechnical Engineer, Structural Engineer, Mechanical Engineer, Electrical Engineer, Design Quality Control Manager, etc. Use continuation sheets, if needed.

A. Name and Title:

B. Assignment on this Project:

C. Name of Firm:

D. Number Of Years: With this Firm/With other firms:

E. Education: Degree(s)/Year/Specialization:

F. Active Registration: Number/State/Year:

G. Specific Experience and Qualifications Relevant to this Project:

CONSTRUCTION PERSONNEL. Use separate sheets

Provide the information listed below on separate sheets for each person showing qualifications of: Construction Project Manager, Construction Site Supervisor, Superintendent, Contractor Quality Control Manager and Safety Officer. Use continuation sheets, if needed.

A. Name and Title:

B. Assignment on this Project:

C. Name of Firm:

D. Number of Years: With this Firm/ With other Firms:

E. Education and/or special credentials and training:

F. Specific Experience and Qualifications Relevant to this Project:

End of Volume 1 Requirements

VOLUME TWO – TECHNICAL SOLUTION

Volume two is an opportunity for you to provide a concept solution for design and construction needed to accomplish requirements for the Eielson Joint Security Forces Complex. Present the material sequentially under the following Tabs, A thru E, to facilitate evaluation.

TAB A: DESIGN NARRATIVE AND DESIGN DRAWINGS

Part I – Narrative. Present a narrative of your design approach and your technical design solution. The Offeror shall certify that his designs shall comply with the most current regulations, standards and codes, or if he is deviating from the most current, to what he is deviating and why. The narrative shall include but not necessarily be limited to the following:

CIVIL

Include the rationale for the major features of the design. Clearly delineate the elements to be constructed. Explain the inter-relationship of the new building(s) to utilities, vehicular traffic, and environmental considerations. Provide a description of traffic flow, drainage, water and waste water disposal, snow removal and storage, etc. Describe your analysis of the geotechnical information and how your conclusions led to the proposed building foundation and pavement sections design. Explain how arctic engineering principles and site specific conditions (soil, sunlight, wind, etc.) influenced your design solution.

ARCHITECTURAL

Describe the overall design concept/approach and the relationship of the facility to the site. Describe the benefit of energy saving devices and long-term low-maintenance features proposed. Also, describe how the proposed solution achieves compatibility with the surrounding built and natural environment.

UTILITIES

Provide a description of your general design approach to the utility system. Your description shall include basis of design, construction materials, and the salient features of the proposed equipment to be used.

COMMUNICATION AND ELECTRICAL SYSTEMS

Provide a descriptive narrative of the communication and electrical systems required for this project. Your description shall include basis of design, construction materials. Also include the salient features of proposed equipment and materials to be used as outlined in section 01010.

MECHANICAL

Provide a narrative description of the basic design approach and the basis of design (summer/winter, indoor/outdoor design conditions for critical and non-critical systems) to include HVAC systems, controls, and plumbing.

STRUCTURAL

Describe the structural concept including basis of design. Describe the structural framing systems and materials and the lateral load resisting systems including the anticipated foundation and how lateral loads will be transmitted to the foundation. Provide a description of any unusual design features such as irregular shapes, large openings, etc. Provide a list of design criteria, design loads and assumptions, and computer software used for analysis. Describe force protection measures incorporated.

HAZMAT ABATEMENT/DEMOLITION

Describe your procedures for handling hazardous materials abatement and demolition if hazardous materials are encountered for this project. Explain how areas not affected by construction will be protected from demolition.

FIRE PROTECTION AND DETECTION

Describe sprinkler system with associated site and equipment needs. Describe relationships of components between civil, architectural, mechanical electrical, and communications disciplines.

Part II - DESIGN DOCUMENTS

DRAWINGS

Include only those drawings required to show the following information. Prints of drawings shall be 1/2 size (12" x 18" or 15" x 21") or 11' x 17' if contained in the binder for ease of review and handling. Provide an index sheet with these drawings.

CIVIL

- Civil Site/Grading Plan (Scale 1:250) - Locate all proposed improvements including: building footprint, site amenities or improvements, parking, landscaping, AC paving, curbs, walks, concrete slabs, and access roadways. Plan shall also indicate proposed finish floor, drainage improvements, culverts, swales, ditches, and utility locations.

LANDSCAPING

- Landscape Site Plan(s) (if not included as part of Civil Site Plan)

ARCHITECTURAL

- Cover sheet with title, drawing index, calculations for certifications (gross and net area and other information to assure that designs fall between the minimum and maximum area limitations in Section 01010), parking, and other pertinent information. Provide comparative code analysis of IBC 2000, UFC 3-600-01 Fire Protection Engineering for Facilities, and NFPA 101, requirements. Gross and net area analysis shall show compliance with program requirements.
- Building Plan(s) (1:100 minimum scale) with sufficient detail to determine scope, function, and conformance to minimum or maximum areas required. Plans will show: walls, doors, windows, circulation, casework & attached components, basic dimensions, room names and square meter size. Roof Plan shall show roof configuration and different materials, drainage, skylights, roof access.
- Enlarged Plan(s) (1:50 minimum scale) shall show First Floor public areas showing features and environmental relationships.
- Exterior Elevations (1:100 minimum scale) shall show floor elevations, finishes and textures, windows, entrances, roof forms.
- Building Section (1:100 minimum scale) shall show major structural elements, walls, floors, ceilings, floor to floor distance(s), grade to roof peak, adjacent grade, and site element relationships.

- Typical Exterior Wall Section(s) (1:10 minimum scale) shall show structural elements, exterior finishes, architectural framing elements, roof/floor/wall assembly call-outs, vertical dimensions.
- Exterior Perspective(s) (one minimum, use color) shall show the building entrance, architectural features, walkways, finish materials, planned site elements and relationship to adjacent dormitory.

STRUCTURAL

- No drawings required.

MECHANICAL

- Provide diagrammatic level drawings as required to demonstrate how the utilities are to be routed within the facility.
- Plan(s) to show layout of all major equipment within Mechanical room and Fan Room with required clearances.

ELECTRICAL

- One line riser diagrams for power, telecommunications, CCTV stubouts, and PA system for interior and exterior of the building.

B. COLOR BOARD

- Provide a color board with samples of primary interior and exterior finish materials. The purpose of the color board is to convey the level of quality proposed for this project. Colors may be changed after award.

TAB B: BETTERMENTS AND INNOVATION

"Betterment" is defined as any component or system identified by the government that exceeds the minimum requirements stated in the Request for Proposal. The Government has identified desired Betterments in order of preference in Section 01010. In narrative form, address each Betterment (if any are possible without exceeding the price target) listed in Section 01010 that you have included in your proposal.

"Innovations" are the offeror's opportunity for design and construction creativity and value engineering. Innovations are defined as portions of proposals where features, components, or systems differ from the minimum requirements of the contract as identified in the Request for Proposal. This section allows offerors to clearly describe improvements to the final product while not exceeding the price target. The

offeror shall provide supporting narrative to show how the Government will benefit from such innovation. Innovations shall be included as part of your base cost proposal.

The mix of betterments and innovations included in the proposal shall be at the discretion of the offeror and shall represent the offerors best value design solution for the price. Betterments shall not be separately priced but shall be included in the offered price of the associated contract line item.

TAB C: PROPOSED SCHEDULE

- a. Capability: Provide a narrative, describing your scheduling capability and planning organization. Address how you maintain, update and use your schedule. Describe the software you intend to use. The software must support the Corps of Engineers Data Exchange format in accordance with Section 01320, Project Schedule.
- b. Duration: **Offeror shall acknowledge that total contract duration proposed in this schedule will become contractually binding provided it is within the number of days stated in SCR-1.**
- b. Schedule: Submit a proposed preliminary schedule for design and construction. This schedule shall clearly show how it compares to the number of days stated in SCR-1. Assume an NTP date of 1 Feb 2004. In addition, the proposed schedule shall be used as the basis for development of the initial NAS as defined by Section 01320. The schedules shall be task oriented, indicating the number of calendar days, after notice to proceed, by which milestones are to be achieved. Offeror may use the method of his choice; however, schedules shall be presented graphically. Give special attention to the following features.
 - 1. Show the design phase, including requirements for submittal and review
 - 2. Show the construction phase for each major feature of construction.
 - 3. Show O&M manual submission and required operator training.
 - 4. Show turnover of the project. Identify any proposed phased Turnovers. Show turnover Inspections.
 - 5. Show as-built submissions.
 - 6. Constraints: Offeror must demonstrate the capability and flexibility to plan and schedule the complete project to meet the proposed contract completion date. Clearly identify any constraints on the schedules presented (e.g., labor or material availability, weather, etc.) indicate the anticipated critical path on the schedule.

TAB D: PROPOSED EQUIPMENT

Furnish manufacturers catalog data on key equipment to indicate type of equipment, size, capacities, manufacturer, and model number to be used in this project. Key equipment includes but is not necessarily limited to: Major mechanical system elements, major elements of fire protection design, typical plumbing and lighting fixtures, and anything you wish to highlight as exceeding the minimum requirements of the RFP. Originals of manufacturer's catalog should be submitted where photocopies may not be legible. Where more than one model or product is depicted on a catalog sheet, circle the product proposed. Material presented in this Tab will be one means of establishing the level of quality to be expected by the government.

TAB E: SMALL BUSINESS SUBCONTRACTING PLAN AND SMALL BUSINESS PARTICIPATION

Prepare a small business utilization plan 252.219. Subcontracting may be submitted within 24 hours of the proposal due date. Proposals shall address the following: The anticipated utilization of small businesses. List each group and goals for each small disadvantaged businesses, woman owned, hub-zone, veteran owned, and disabled veteran owned and prepare plan in accordance with FAR 52.219-9. The suggested subcontracting plan format is attached. (NOTE: Small businesses are not required to submit this plan.)

VOLUME THREE –PRICING

Organize the material sequentially under the following Tabs.

TAB A: SECTION 00600

Provide requirements of 00600 of this request for proposal. (Reps and Cert.)

TAB B: PRE-AWARD SURVEY BANK REFERENCE

Submit the Pre-Award Questionnaire form along with a letter from your financial institution confirming your firm's business and financial reputation, integrity, and ability to execute this contract. This letter must include information regarding any outstanding loans, past performance on loan payments, and general account information (for example, XYZ Corporation routinely maintains a checking balance in the six figures.).

TAB C: PRICE INFORMATION

The price information supporting the Technical Proposal shall be in the form of the proposal schedule contained in the front of this solicitation and include a signed SF1442. The initial review of the Price Proposal will result in a determination as to reasonableness and affordability compared to the independent government estimate.

Joint ventures must provide a copy of their Joint Venture Agreement. LLCs must provide a copy of their Articles of Organization. JVs and LLCs must provide evidence that the person(s) signing the offer has the authority to bind the organization.

TAB E. POINTS OF CONTACT

Provide a primary and secondary points of contact for the construction contractor should any questions arise from review of this offer. Information shall include: Name; Title; Address; Phone; Fax number; and E-mail address

TAB F. IDENTIFY TEAM MEMBERS

Identify the prime contractor(s) and the lead design firm associated with the team. Provide the name and address of each firm.

END OF SECTION 00100

PAST PERFORMANCE INTERVIEW FORM

The U.S. Army Corps of Engineer, Alaska District is conducting a past performance survey for an upcoming award. Please take the time to answer the Past Performance Interview Questions below. If you have any questions, please do not hesitate to contact this office. When Filled In This Document Is Source Selection Sensitive Information IAW FAR 3.104

Name of Respondent: _____

Contract Number: _____

A. **GENERAL INFORMATION:** Please correct any information below known to be inaccurate:

Contractor's Name: _____

Address: _____ Telephone Number: _____

Point of Contact: _____

Project Title or Brief Description of Work: _____ *

Contract Number Provided by Offeror: _____ *

Dollar Amount: _____ *

Contract Period or Dates of Performance Provided by Offeror: _____

****Note: If information is incorrect, please provide correct number. Also, if offeror holds or has held other relevant contracts with your agency/organization in the last 3 years, please complete separate evaluation forms for those contracts as well.***

Contractor Performed as the ?**Prime** Contractor ?**Sub**-Contractor.

B. **RESPONDENT INFORMATION:**

Name of Respondent: _____

Title: _____

Address: _____

Telephone Number: _____

Fax Number: _____

Email Address: _____

C. **FAX OR EMAIL COMPLETED QUESTIONNAIRE FORM TO:**

U.S. Army Engineer District, Alaska District
Attn: Contracting Division (June Wohlbach)
P.O. Box 6898,
Elmendorf AFB, AK 99506-6898.
(907) 753-5624 or FAX (907) 753-2544

E-mail: june.l.wohlbach@poa02.usace.army.mil

D. **PERFORMANCE INFORMATION:** Choose the number on the scale of 1 to 6 that most accurately describes the contractor's performance or situation. **PLEASE PROVIDE A NARRATIVE EXPLANATION FOR ANY RATINGS OF 1 OR 2.**

1	2	3	4	5	6
Unsatisfactory	Marginal	None	Satisfactory	Very Good	Exceptional
Performance did not meet most contractual requirements. There were serious problems and the contractor's corrective actions were ineffective.	Performance did not meet some contractual requirements. There were problems, some of a serious nature, for which corrective action was only marginally effective.	No record of past performance or the record is inconclusive	Performance met contract requirements. There were some minor problems and corrective actions taken by the contractor were satisfactory.	Performance met all contract requirements and exceeded some to the government's benefit. There were a few minor problems, which the contractor resolved in a timely, effective manner.	Performance met all contract requirements and exceeded many to the government's benefit. Problems , if any, were negligible and were resolved in a timely, highly effective manner

	The contractor:							
1.	Provided experienced managers and supervisors with the technical and administrative abilities needed to meet contract requirements.	1	2	3	4	5	6	N/A
2.	Demonstrated ability to hire, maintain, and replace, if necessary, qualified personnel during the contract period.	1	2	3	4	5	6	N/A
3.	Delegated authority to project managers and supervisors	1	2	3	4	5	6	N/A
4.	Home office participated in solving significant local problems.	1	2	3	4	5	6	N/A
5.	Followed approved quality control plan.	1	2	3	4	5	6	N/A
6.	Provided effective quality control and/or inspection procedures to meet contract requirements.	1	2	3	4	5	6	N/A
7.	Corrected deficiencies in timely manner and pursuant to their quality control procedures.	1	2	3	4	5	6	N/A
8.	Provided timely resolution of contract discrepancies	1	2	3	4	5	6	N/A
9.	Identified risks/problems as they occurred.	1	2	3	4	5	6	N/A
10.	Suggested alternative approaches to problems.	1	2	3	4	5	6	N/A
11.	Displayed initiative to solve problems.	1	2	3	4	5	6	N/A
12.	Developed realistic progress schedules.	1	2	3	4	5	6	N/A
13.	Met established project schedules.	1	2	3	4	5	6	N/A
14.	Provided timely resolution of warranty defects.	1	2	3	4	5	6	N/A
15.	Was responsive to contract changes.	1	2	3	4	5	6	N/A
16.	Provided adequate project supervision.	1	2	3	4	5	6	N/A
17.	Obtained consent of surety for increases in bonding as work-in-progress increased.	1	2	3	4	5	6	N/A

18.	Paid subcontractors/suppliers in a timely manner.	1	2	3	4	5	6	N/A
19.	Provided accurate and complete line item cost proposals including all aspects of work required for each task.	1	2	3	4	5	6	N/A
20.	Demonstrated ability to deploy equipment and materials in a timely manner	1	2	3	4	5	6	N/A
21.	Provided experienced managers and supervisors with technical and administrative abilities to meet contract requirements	1	2	3	4	5	6	N/A
22.	Management of subcontracts	1	2	3	4	5	6	N/A
23.	Compliance with labor standards	1	2	3	4	5	6	N/A
24.	Compliance with safety standards	1	2	3	4	5	6	N/A
25.	Cooperated with contracting agency personnel after award.	1	2	3	4	5	6	N/A
26.	Selected appropriate methods & materials for arctic/sub-arctic construction	1	2	3	4	5	6	N/A
27.	Planned for mob, demob, execution in light of constraints and hardships encountered in arctic/sub-arctic construction	1	2	3	4	5	6	N/A
28.	Performed work in arctic/sub-arctic condition	1	2	3	4	5	6	N/A
29.	Build and managed cohesive team for design-build efforts	1	2	3	4	5	6	N/A
30.	Adhered to codes and regulations	1	2	3	4	5	6	N/A
31.	Met needs of and addressed concerns of future facility occupants	1	2	3	4	5	6	N/A
32.	Provided functional and operable facilities	1	2	3	4	5	6	N/A
33.	Quality Control: Followed approved quality control plan; provided effective quality control and/or inspection procedures to meet contract requirements; corrected deficiencies in timely manner and pursuant to their quality control procedures	1	2	3	4	5	6	N/A
34.	Provide timely resolution of contract discrepancies	1	2	3	4	5	6	N/A
35.	Identified risks/problems as they occurred	1	2	3	4	5	6	N/A
36.	Suggested alternative approaches to problems	1	2	3	4	5	6	N/A
37.	Displayed initiative to solve problems	1	2	3	4	5	6	N/A
38.	Was the contractor ever issued a cure or show cause notice under the referenced contract? If yes, explain outcome in "remarks."						Yes	No
39.	Would you award another contract to this contractor? If not, explain in "remarks."						Yes	No

Remarks: _____

[illegible]

SUBCONTRACTOR/TEAMING PARTNER CONSENT FORM FOR THE RELEASE OF PAST AND PRESENT PERFORMANCE INFORMATION TO THE PRIME CONTRACTOR

Past performance information concerning subcontractors and teaming partners cannot be disclosed to a private party without the subcontractor's or teaming partner's consent. Because a prime contractor is a private party, the Government will need that consent before disclosing subcontractor/teaming partner past and present performance information to the prime during exchanges. In an effort to assist the Government's Source Selection Team in assessing your past performance relevancy and confidence, we request that the following consent form be completed by the major subcontractors/teaming partners identified in your proposal. The completed consent forms should be submitted as part of your Past Performance Part I (or Proposal).

SAMPLE

Dear (Contracting Officer)

We are currently participating as a (subcontractor/teaming partner) with (prime contractor or name of entity providing proposal) in responding to the U.S. Army Corps of Engineers, (location) request for Proposal (solicitation number) for the (program title or description of effort).

We understand that the Government is placing increased emphasis on past performance in order to obtain best value in source selections. In order to facilitate the performance confidence assessment process we are signing this consent form to allow you to discuss our past and present performance information with the prime contractor during the source selection process.

(Signature and Title of individual who has the authority to sign for and legally bind the company)

Company Name:

Address:

PROJECT EXPERIENCE FORM

Provide a completed form for each project for which experience is being claimed for the prime contractor, sub-contractor and design firm/team.

Name of
offeror _____

Work performed by Offeror [] and [] or by key subcontractor/design firm.
_____ (enter firm name and check
"and" or "or" as applicable)

Was the project design-build? _____

Name of
Project: _____

Location of
Project: _____

Was Project a firm fixed price contract (Y/N)? _____ If No, what type was it _____

Brief Description of Project _____

Contract Amount at Award: _____ Final Contract Amount or Estimated Cost at Completion:
_____ Amount added by Modification: _____

Explanation of any Cost Growth

Multiple Interim Schedule Milestones (to include scheduled start date):

Original Contract Completion Date: _____ Final Contract Completion Date: _____

Actual Completion Date : _____ Time added by Modification: _____

Explanation of any Late Finish:

Was the project terminated early or were cure/show cause letters received? ___Yes___No

Explain early termination (default/convenience) or cure/show cause letters_____

Safety record: ____Accidents, ____Incidents, ____Violations

List and explain any customer concerns or dissatisfaction. Explain how you responded.

What were the SDB, WOB and small business percent goals in the original contract?

SDB:____ WOB:____ Small Business:____ HBCU:____HUBZONE:____MI:____

What was the actual percent achieved at contract completion?

SDB:____ WOB:____ Small Business:____ HBCU:____HUBZONE:____MI:____

Extent and Types of Work Subcontracted.

Was the project owner an agency of the federal government?____Yes____No

Name, address, FAX and telephone number of the owner:

Name and telephone number of a representative of your firm who is knowledgeable of this project and can readily be contacted:

Name, address, FAX and telephone number of a representative of the owner who is knowledgeable of this project and can be readily contacted:

Name, address, FAX and telephone number of the Contracting Officer if project was for federal government:

SUBCONTRACTING GOALS FY 2004
for the Alaska District Contracts
(THIS PLAN MAY BE SUBMITTED WITHIN
24 HOURS AFTER THE PROPOSAL DUE DATE)

Small Business	57.2%
Small Disadvantaged	8.9%
Woman-Owned Small Business	8.1%
Veteran-Owned Small Business	3.0%
Service Disabled Veteran-Owned Small Business	3.0%
HUBZone Small Business	3.0%

1. SUBMIT YOUR PLAN IN THE ATTACHED FORMAT
2. Subcontracting Plans will be evaluated in accordance with FAR Clause 52.219-9 Alternate II and AFARS Appendix DD.

SUBCONTRACTING PLAN

FIRM: _____ Sol. No. DACA85-03-R-0033

_____ Contract No. _____

PROJECT TITLE _____

CONTRACT SPECIALIST RESPONSIBLE FOR PRE-AWARD

Ms. June Wohlbach 907/753-5624

NAME OF OFFICE ADMINISTERING CONTRACT TO INCLUDE SUBCONTRACTING PLAN: (If more than one office, name all offices/responsible parties):

I. Dollar Amounts (If possible, DO NOT include indirect costs):

SEE ATTACHED TABLE

II. Percentage goals (expressed in terms of percentage of total planned subcontracting dollars).

SEE ATTACHED TABLE

1. State your firm's policy statement or evidence of internal guidance to company buyers recognizing commitment to Pub. L. 99-661, Section 1207, and Pub.L. 100-180, Section 806. Describe special emphasis placed on subcontracting with SDBs. Describe corporate and management commitment to meeting your subcontracting plan. (HBCUs & MI are excluded from evaluation).

2. Describe your firm's efforts to broaden SB, SDB, WOSB , HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned small business active vendor base. Specifically describe your efforts in increasing subcontracts to SBs and SDBs for non-complex and general housekeeping supplies or services normally awarded to firms already in your firm's vendor base. Describe established plans to use competition restricted to SDBs and give details about how your firm will accomplish this. (HBCUs & MI are excluded from evaluation).

3. Describe your firm's "Outreach Efforts" to work with organizations to identify potential sources for items not traditionally awarded to SB, SDB, WOSB, HUBZone SB, Service Disabled Veteran Owned SB, and Veteran-Owned SB firms. And, your proposed plan to conduct reviews to determine the competence, ability, experience and capacity available in SB, SDB, WOSB, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SB firms and to provide them technical assistance. (HBCUs & MIs are excluded from evaluation).

4. Describe supplies and services to be subcontracted and planned for subcontracting to SBs, SDBs, WOSBs, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SB firms. Indicate intent to review major product/system components and key project elements of R&D, construction, service and spare parts contracts for subcontracting to each of the above elements. Specifically describe how your plan targets specific SBs, SDBs, WOSBs, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SB for review to determine their competence, ability, experience and capacity and identifies specific components or major portions of the acquisition for consideration of the above elements. Describe your firm's intent to work with large business subcontractors for major subsystems or key project elements to ensure "flowdown" of this philosophy. (HBCUs & MIs are excluded from evaluation).

5. Describe your firm's efforts, based on results of efforts described in No. 3 and No. 4 above to ensure that opportunity to participate in acquisitions. Specifically, describe how the firm intends to evaluate its own SB, SDB, WOSB, HUBZone SB, Service Disabled Veteran-Owned SB and Veteran-Owned SB award performance and program effectiveness against the established goals, both company-wide and for individual plan being negotiated. Include SBs, SDBs, WOSBs, HUBZone SBs, Service Disabled Veteran-Owned SB and Veteran-Owned SB by name as members of original team for providing major service or performing a significant portion of the effort. Additionally, how does your firm plan to establish long-range relationships with the above elements? (HBCUs & MIs are excluded from evaluation).

6. Your firm's plan (in section I and II) will be evaluated on the development of percentage goals based on planned subcontracting which is challenging, yet realistic as stated in item # 6 of Appendix CC of the AFARS. (HBCUs & MIs are excluded from evaluation).

7. Past performance to the extent your firm has historically been successful in establishing realistic, yet challenging, goals and achieving them will be evaluated. In cases where there has been no previous defense contract history, your firm will not be penalized. (HBCUs & MIs are excluded from evaluation).

8. Regulatory and statutory requirements described in # 8 of Appendix CC must be included in your firms subcontracting plan and will be evaluated accordingly. If any of the subject elements are not complied with, your plan will not be approved and will be returned to your office for revision before the contract can be awarded. Included in the appendix are the following elements to include WOSBs, HUBZone SBs, Service Disabled Veteran-Owned SB, and Veteran-Owned SB. (HBCUs & MIs are excluded from evaluation).

- a) A separate goal for SB, SDB, WOSBs, HUBZone SB, Service Disabled Veteran-Owned SB and Veteran-Owned SB .
- b) A separate goal for the basic contract and, if applicable, each option.
- c) The name of the company employee responsible for administration of plan and employee's duties as follows:

The individual who will administer this firm's subcontracting program:

NAME _____ ADDRESS _____
 TELEPHONE _____

Describe Description of duties:

- d) A statement affirming intent to comply with subcontracting "flowdown" provisions as follows:

This firm will include Clause 52.219-8 entitled, "Utilization of Small Business Concerns, Small Disadvantaged, Women-Owned Small Business Concerns," in all subcontracts which offer further subcontracting opportunities and will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,0000.00 to adopt and comply with a plan similar to the plan required by the clause at 52.219-9 Alternate II, "Small Business Subcontracting Plan." (HBCUs & MIs are excluded from evaluation).

- e) A statement affirming willingness to cooperate in studies and to provide reports as follows:

This firm will submit such periodic reports and cooperate in any studies or surveys as may be required by the Corps of Engineers, Alaska District or the Small Business Administration in order to determine the extent of compliance by the company with the subcontracting plan as follows:

This firm will submit Standard Form (SF) 294, Subcontracting Report for Individual Contract, and SF 295, Summary Subcontract in accordance with the instructions on the forms. The name, address, and telephone number of the office responsible for preparation and submission of the reports is:

I, the undersigned, a designated officer of do hereby state that this firm agrees to carry out the Government's policy to provide the maximum practicable opportunity for small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals to participate in the performance of this contract consistent with its efficient performance.

- f) A statement that indirect costs are either included or excluded from the proposed goals and, and if included, how they will be prorated.

g) Description of efforts to ensure that SBs, SDBs, WOSBs, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SBs have an equitable opportunity to participate in the acquisition: (HBCUs & MIs are excluded from evaluation).

h) A recitation of the types of records maintained to demonstrate procedures adopted to comply with the requirements and goals in the plan as follows:

This firm will maintain the following types of records to demonstrate procedures which have been adopted to comply with the requirements and goals set forth in the plan. (Set forth here are the records to be maintained. In order to be considered acceptable, the records shall include at the minimum the following:)

(1) SB, SDB, WOSB, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SB lists, guides, and other data identifying vendors.

(2) Organizations contacted or to be contacted for SB, SDB, WOSB, HUBZone SB, Service Disabled Veteran-Owned SB, and Veteran-Owned SB sources.

(3) Record of all subcontract solicitations indicating on each solicitation (i) whether SB, SDB, WOSB, HUBZone SB and Veteran-Owned SBs were solicited, and if not, why not.

(4) Records to support other outreach efforts, to include the following: contact with minority and small business trade associations, contact with business development organizations, and attendance at small and minority business procurement conferences and trade fairs.

(5) Records to support internal activities to guide and encourage buyers to include the following: workshops, seminars, training programs, and monitoring activities to evaluate compliance.

(6) Records to support award data on a contract-by-contract basis submitted to the Government to include name, address, and business size of subcontractor.

FIRM'S REPRESENTATIVE:

SIGNATURE: _____

PRINTED/TYPED NAME: _____

TITLE: _____

GOVERNMENT REVIEW

CONTRACT SPECIALIST _____

DEPUTY FOR SMALL BUSINESS (DSB) REVIEW:

1. Received Date: _____ 2. Returned Date: _____

3. Recommendation Date: _____

CONTRACTING OFFICER _____
Signature

NAME & TITLE _____

DATE _____

TABLE 1: Subcontracting dollars

TABLE 2: Subcontracting goals

TABLE 1: Subcontracting dollars

	Base (CLINS 1, 2 & 5, 6)	Option 1 (CLIN 3)	Option 2 (CLIN 4)	Option 1 (CLIN 7)	Option 2 (CLIN 8)	Option 3 (CLIN 9)	Option 4 (CLIN10)
a. Total amount of contract							
b. Total estimated amount of planned subcontracted dollars							
TOTAL DOLLARS PLANNED TO BE SUBCONTRACTED							
c. Small business (including d, e, f, & g below)							
d. Small disadvantaged businesses							
e. Woman-owned small businesses							
f. Veteran-owned small businesses							
g. Service disabled veteran- owned small businesses							
h. HUB-zone small businesses							

TABLE 2: Subcontracting goals

	Base (CLINS 1, 2 & 5, 6)	Option 1 (CLIN 3)	Option 2 (CLIN 4)	Option 1 (CLIN 7)	Option 2 (CLIN 8)	Option 3 (CLIN 9)	Option 4 (CLIN 10)
a. Percentage of contract to be subcontracted (1b divided by 1a)							
PERCENTAGE OF SUBCONTRACTING DOLLARS TO BE SUBCONTRACT TO							
b. Small business (1c divided by 1b)							
c. Small disadvantaged businesses (1d divided by 1b)							
d. Women-owned small businesses (1e divided by 1b)							
f. Veteran-owned small businesses (1f divided by 1b)							
g. Service disabled veteran-owned small businesses (1g divided by 1b)							
h. HUB-zone small businesses (1h divided by 1b)							

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY FULL TEXT

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at <http://www.customerservice@dnb.com>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com.

(End of provision)

52.211-14 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (SEP 1990)

Any contract awarded as a result of this solicitation will be DX rated order; c02 DO rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation. [Contracting Officer check appropriate box.]

(End of provision)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (MAY 2001)

(a) Definitions. As used in this provision--

“Discussions” are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

“In writing or written” means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

“Proposal modification” is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

“Proposal revision” is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

“Time”, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) Amendments to solicitations. If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals. (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show--

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) Submission, modification, or revision, of proposals.

(i) Offerors are responsible for submitting proposals, and any modifications, or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii)(A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

(1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall--

(1) Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part--for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of--or in connection with-- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend: Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award. (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

(8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

(11) The Government may disclose the following information in postaward debriefings to other offerors:

(i) The overall evaluated cost or price and technical rating of the successful offeror;

- (ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;
 - (iii) A summary of the rationale for award; and
 - (iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.
- (End of provision)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

(a) Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(b) The Government may reject an offer as nonresponsive if it is materially unbalanced as to prices for the basic requirement and the option quantities. An offer is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(End of provision)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
8.7 (Anchorage, AK) 15.1 (Locations outside City of Anchorage)	6.9 (Alaska)

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the

contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is
[Contracting Officer shall insert description of the geographical areas where the contract is to be performed, giving the State, county, and city].

(End of provision)

52.222-24 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATION (FEB 1999)

If a contract in the amount of \$10 million or more will result from this solicitation, the prospective Contractor and its known first-tier subcontractors with anticipated subcontracts of \$10 million or more shall be subject to a preaward compliance evaluation by the Office of Federal Contract Compliance Programs (OFCCP), unless, within the preceding 24 months, OFCCP has conducted an evaluation and found the prospective Contractor and subcontractors to be in compliance with Executive Order 11246.

(End of provision)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

- (1) Pledge of assets; and
- (2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

- (1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Chief, Contracting Division, US Army Corps of Engineers, 2204 Third Street, Elmendorf AFB, Alaska.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION (NOV 2001)

(a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://www.ccr.gov>.

(End of clause)

SECTION 00120

EVALUATION FACTORS FOR AWARD

I. Initial Proposal Acceptability

The Government will award the contract to the offeror of the proposal that represents the best overall value to the Government. Before a proposal will be considered for evaluation and subsequent award of contract, the offeror must assent to the terms and conditions in RFP Sections 00010 through 00800 without exception. The Government may exclude a proposal from further consideration if the offeror takes exception to any of the terms and conditions in RFP Sections 00010 through 00800.

II. Proposal Evaluation

The Government will evaluate the proposals of each offeror based on how well their proposal addresses each of the Factors listed below and described under the various Tabs (A, B, C, etc.) in Section 00100. The evaluation will determine the offeror's overall cohesive approach in assimilating these various elements for each Factor into a comprehensive, consistent, and concise proposal that meets or exceeds the Government's minimum requirements or provides acceptable innovations.

The Government intends to award the contract without discussion. The proposal is therefore expected to be self-explanatory in addressing all of the required criteria.

III. Factors For Evaluation

VOLUME ONE

- Experience/Past Performance (Tab A)
- Organization (Tab B)

VOLUME TWO

- Design Narrative & Design Drawings (Tab A)
- Betterments and Innovations (Tab B)
- Proposed Schedule (Tab C)
- Proposed Equipment (Tab D)
- Subcontract Plan and Small Business Participation (NOTE: This factor will be evaluated as a technical factor but must be submitted under Tab C of Volume Three)

VOLUME THREE

- Pre-Award Survey and Bank Reference (Tab A)
- Price Information (includes the signed SF1442 and certificate) (Tab B)
- Subcontract Plan and Small Business Participation (Tab C)

Volume One Factors

EXPERIENCE/ PAST PERFORMANCE

The Government defines experience as learning by doing. The Government will evaluate the depth and breadth of an offeror's experience on the basis of the number of times and how recently it has performed projects that were similar in nature, scope, and complexity to the work that will be required by this RFP.

In conjunction with Experience, the Government will evaluate your past performance on each of the projects presented to determine how well you have satisfied your customers. Offerors will be evaluated on the extent to which past performance submittals demonstrate the likelihood of meeting or exceeding Government goals and requirements. The Government may contact some of each offeror's customers and others to determine whether the offeror: conforms to the terms and conditions of its contracts; obeys the law; is honest, reasonable, and cooperative; maintains good labor relations; manages its subcontractors effectively; and, is committed to customer satisfaction. The Government may contact sources outside those listed in the proposal.

ORGANIZATION

The Government will evaluate each offeror's ability to perform this work in terms of team composition, how you organize personnel for this project and the qualifications of those personnel. In addition, the Government will evaluate your approach to design and construction coordination and quality management.

VOLUME TWO FACTORS

DESIGN NARRATIVE AND DESIGN DRAWINGS

The Government will evaluate each offeror's understanding of the requirements described in this RFP based on the proposed technical data submitted. The government will review the Design Narrative and Design Drawings for the offeror's overall cohesive approach in assimilating the requirements of Section 01010 into a comprehensive, consistent proposal that meets or exceeds the government's expectations.

BETTERMENTS AND INNOVATIONS

In the factor Betterments and Innovation, the government will evaluate the offeror's mix of government identified betterments and innovative ideas by the offeror as they relate to improved value for this project. All proposed betterments/innovations must remain within the available funds identified at the beginning of section 00100.

The Government will also evaluate innovations listed by the contractor relative to the minimum standards in the RFP. Innovations will be evaluated to determine if the creative ideas of the offeror are a better value to the Government compared to the minimum criteria established in Section 01010.

PROPOSED SCHEDULE

In the factor Schedule the Government will evaluate the Schedule and Network Analysis or Gantt chart along with all additional required data showing the offeror's proposed schedule to ensure that the project can be completed within the specified time stated in SCR-1. The schedule shall be complete, reasonable, and realistic in order to evaluate the contractor's understanding of all construction requirements.

PROPOSED EQUIPMENT

For the factor of proposed equipment and outline specifications, the government will evaluate the overall level of quality that can be expected based on the salient features of proposed equipment and quality and suitability of materials.

SUBCONTRACTING PLAN AND SMALL BUSINESS PARTICIPATION

The Government will evaluate each offeror's proposed subcontracting plan for the utilization of small businesses in accordance with AFARS Appendix DD.

IV. Relative Importance of Individual Evaluation Factors

Volume One. For Volume one, the Government considers all the Factors to be of approximately equal importance.

Volume Two. For Volume Two, all Factors are in descending order of importance.

Volume Three The Government will perform a price analysis comparing the proposed price to the independent government estimate and prices of other offerors. Price shall be evaluated for reasonableness and affordability.

EVALUATION PREFERENCE: All HUBzone firms submitting as prime contractor will be provided a price evaluation in accordance with the FAR clause, 52.219-4 noted in Section 0600.

V. Relative Importance of Overall Evaluation Factors The Government considers the complete evaluation factors for Volume One to be of equal importance to Volume Two. Volumes One and Two together (non-price) are considered to be to be significantly more important than Volume Three (price). The offeror should note that, under this scenario, price is not the most important factor for award.

VII. The Determination of Best Overall Value

In order to determine which proposal represents the best overall value, the Government will compare proposals to one another in a series of paired comparisons, trading off offerors' values based on their overall performance on the non-price factors.

In comparing two proposals, if one member of a pair has both the better overall non-price value and the lower price, then the Government will consider that proposal to be a better value.

If two of the highest rated proposals have the same non-price rating, the lower priced proposal shall be considered the better value.

If one member of a pair has the better overall non-price value, but a higher price than the other proposal, then the Government's source selection authority will determine if the difference in non-price value is worth the difference in price.

If the source selection authority decides that the overall non-price value is worth the higher price, then the Government will consider the proposal with the better non-price value and the higher price to be the better overall value.

If the Source Selection Authority decides that the overall value is not worth the higher price, then the Source Selection Authority will continue to make paired comparisons in this fashion until he or she has identified the proposal that represents the best overall value. The contract will be awarded to the offeror with the best overall value.

VII. EVALUATION OF OPTIONS

The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the base requirement. Evaluation of options will not obligate the Government to exercise the option(s).

VIII. DISTRIBUTION OF STIPENDS

If a contract is awarded, a stipend of \$110,000 will be evenly divided (rounded to the nearest dollar) among all unsuccessful offerors who submit a minimally acceptable design based upon criteria as stated in Section 01010 or provides functional and well-supported innovative solutions and submit the required documents for evaluation as outlined in Section 00100. If no contract award results from this solicitation, the stipend will be evenly divided (rounded to the nearest dollar) among all offerors who submit a minimally acceptable design based upon criteria as stated in Section 01010 or provides functional and well-supported innovative solutions and submit the required documents for evaluation as outlined in Section 00100.

END OF SECTION 00120

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to --

(i) Those prices,

(ii) The intention to submit an offer, or

(iii) The methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision _____ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(1) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

“Common parent,” as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

“Taxpayer Identification Number (TIN),” as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

___ TIN:_____

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

___ Corporate entity (tax-exempt);

___ Government entity (Federal, State, or local);

___ Foreign government;

___ International organization per 26 CFR 1.6049-4;

___ Other _____

(f) Common parent.

___ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

___ Name and TIN of common parent:

Name _____

TIN _____

(End of provision)

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

(a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it () is a women-owned business concern.

(End of provision)

52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals --

(A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was

placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002) - ALTERNATE I (APR 2002)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 236210.

(2) The small business size standard is \$28.5 million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it () is, () is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.

(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a veteran-owned small business concern.

(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it () is, () is not a service-disabled veteran-owned small business concern.

(6) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It () is, () is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It () is, () is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:_____.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.) The offeror shall check the category in which its ownership falls:

____ Black American.

_____ Hispanic American.

_____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

_____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

_____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

_____ Individual/concern, other than one of the preceding.

(c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; or

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-2 EQUAL LOW BIDS. (OCT 1995)

(a) This provision applies to small business concerns only.

(b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

(c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-

- (i) Offers from HUBZone small business concerns that have not waived the evaluation preference;
- (ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

___ Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

(b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [] is, [] is not an emerging small business.

(c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues

____ 50 or fewer ____ \$1 million or less
 ____ 51 - 100 ____ \$1,000,001 - \$2 million
 ____ 101 - 250 ____ \$2,000,001 - \$3.5 million
 ____ 251 - 500 ____ \$3,500,001 - \$5 million
 ____ 501 - 750 ____ \$5,000,001 - \$10 million
 ____ 751 - 1,000 ____ \$10,000,001 - \$17 million
 ____ Over 1,000 ____ Over \$17 million

(End of provision)

52.219-21 SMALL BUSINESS SIZE REPRESENTATION FOR TARGETED INDUSTRY CATEGORIES UNDER THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (MAY 1999)

(Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues

____ 50 or fewer ____ \$1 million or less
 ____ 51 - 100 ____ \$1,000,001 - \$2 million
 ____ 101 - 250 ____ \$2,000,001 - \$3.5 million
 ____ 251 - 500 ____ \$3,500,001 - \$5 million

____ 501 - 750 ____ \$5,000,001 - \$10 million

____ 751 - 1,000 ____ \$10,000,001 - \$17 million

____ Over 1,000 ____ Over \$17 million

(End of provision)

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) () It has, () has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b) () It has, () has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.222-25 AFFIRMATIVE ACTION COMPLIANCE (APR 1984)

The offeror represents that

(a) [] it has developed and has on file, [] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or

(b) [] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(End of provision)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (DEC 2001)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

(a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

() (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

() (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

() (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

() (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

(A) Major group code 10 (except 1011, 1081, and 1094.

(B) Major group code 12 (except 1241).

(C) Major group codes 20 through 39.

(D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

() (v) The facility is not located within the United States or its outlying areas.

(End of clause)

52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

(a) Proposals must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.

(b) The proposal form may require offerors to submit proposed prices for one or more items on various bases,

including--

- (1) Lump sum price;
 - (2) Alternate prices;
 - (3) Units of construction; or
 - (4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.
- (c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words "no proposal" in the space provided for any item on which no price is submitted.
- (d) Alternate proposals will not be considered unless this solicitation authorizes their submission.
- (End of provision)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.
- (3) "Significant interest" means --
 - (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
 - (ii) Holding a management position in the firm, such as a director or officer;
 - (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
 - (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
 - (v) Holding 50 percent or more of the indebtedness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns

the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclose such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

____ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

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Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (DEC 2001)

(a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.

(b) Commercial component means any component that is a commercial item.

(c) Commercial item means--

(1) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. "Minor" modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if--

(i) Such services are procured for support of an item referred to in paragraph (c)(1), (2), (3), or (4) of this definition, regardless of whether such services are provided by the same source or at the same time as the item; and

(ii) The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed. For purposes of these services--

- (i) Catalog price means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public; and
 - (ii) Market prices means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors.
 - (7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or
 - (8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.
 - (d) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).
 - (e) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.
 - (f) Nondevelopmental item means--
 - (1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;
 - (2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or
 - (3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.
 - (g) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.
 - (h) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.
- (End of clause)

52.203-3 GRATUITIES (APR 1984)

- (a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--
 - (1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and
 - (2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed \$100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27(a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.
- (b) The price or fee reduction referred to in paragraph (a) of this clause shall be--
- (1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;
 - (2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;
 - (3) For cost-plus-award-fee contracts--
 - (i) The base fee established in the contract at the time of contract award;
 - (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
 - (4) For fixed-price-incentive contracts, the Government may--
 - (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
 - (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.
 - (5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.
- (c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.
- (d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 2003)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

State, as used in this clause, means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

(a) Definitions. As used in this clause--

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.” For paper and paper products, postconsumer material means “postconsumer fiber” defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

“Printed or copied double-sided” means printing or reproducing a document so that information is on both sides of a sheet of paper.

“Recovered material,” for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as “recovered fiber” and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-6 BRAND NAME OR EQUAL (AUG 1999)

(a) If an item in this solicitation is identified as "brand name or equal," the purchase description reflects the characteristics and level of quality that will satisfy the Government's needs. The salient physical, functional, or performance characteristics that "equal" products must meet are specified in the solicitation.

(b) To be considered for award, offers of "equal" products, including "equal" products of the brand name manufacturer, must--

(1) Meet the salient physical, functional, or performance characteristic specified in this solicitation;

(2) Clearly identify the item by--

(i) Brand name, if any; and

(ii) Make or model number;

(3) Include descriptive literature such as illustrations, drawings, or a clear reference to previously furnished descriptive data or information available to the Contracting Officer; and

(4) Clearly describe any modifications the offeror plans to make in a product to make it conform to the solicitation requirements. Mark any descriptive material to clearly show the modifications.

(c) The Contracting Officer will evaluate "equal" products on the basis of information furnished by the offeror or identified in the offer and reasonably available to the Contracting Officer. The Contracting Officer is not responsible for locating or obtaining any information not identified in the offer.

(d) Unless the offeror clearly indicates in its offer that the product being offered is an "equal" product, the offeror shall provide the brand name product referenced in the solicitation.

(End of provision)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$1,167 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-13 TIME EXTENSIONS (SEP 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990)

This is a rated order certified for national defense use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

(End of clause)

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

(a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an

authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

(d) Comptroller General--(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--

- (1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and
- (2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--

- (1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;
- (2) For which cost or pricing data are required; or
- (3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-10 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (OCT 1997)

(a) If any price, including profit or fee, negotiated in connection with this contract, or any cost reimbursable under this contract, was increased by any significant amount because--

(1) The Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) A subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) Any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction.

(b) Any reduction in the contract price under paragraph (a) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(c)(1) If the Contracting Officer determines under paragraph (a) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (c)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the “as of” date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the “as of” date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the “as of” date specified on its Certificate of Current Cost or Pricing Data.

(d) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-12 SUBCONTRACTOR COST OR PRICING DATA (OCT 1997)

(a) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract

modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4, when entered into, the Contractor shall insert either--

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Cost or Pricing Data--Modifications.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm-Fixed Price contract resulting from this solicitation.

(End of clause)

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

___ Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to HUBZone small business concerns;

(v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and

(vi) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating--

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--

(1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final

decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

(End of clause)

52.222-3 CONVICT LABOR (JUN 2003)

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons--

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or **regulations** of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding \$100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans,

funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis -Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(2) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis -Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis -Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis -Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis -Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis -Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable

apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis -Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis -Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed

Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

- (ii) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(End of clause)

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis -Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis -Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis -Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis -Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis -Bacon Act or 29 CFR 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
8.7 (Anchorage, Alaska) 15.1 (Locations Outside City of Anchorage)	6.9 (Alaska)

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the

goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is "See above"

(End of provision)

52.222-26 EQUAL OPPORTUNITY (APR 2002)

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not

be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(End of clause)

52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)

(a) Definitions. As used in this clause--

All employment openings means all positions except executive and top management, those positions that will be filled from within the Contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment.

Executive and top management means any employee--

(1) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;

(2) Who customarily and regularly directs the work of two or more other employees;

(3) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight;

(4) Who customarily and regularly exercises discretionary powers; and

(5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

Other eligible veteran means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

Positions that will be filled from within the Contractor's organization means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Qualified special disabled veteran means a special disabled veteran who satisfies the requisite skill, experience, education, and other job-related requirements of the employment position such veteran holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

Special disabled veteran means--

(1) A veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Department of Veterans Affairs for a disability--

(i) Rated at 30 percent or more; or

(ii) Rated at 10 or 20 percent in the case of a veteran who has been determined under 38 U.S.C. 3106 to have a serious employment handicap (i.e., a significant impairment of the veteran's ability to prepare for, obtain, or retain employment consistent with the veteran's abilities, aptitudes, and interests); or

(2) A person who was discharged or released from active duty because of a service-connected disability.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.

(b) General. (1) The Contractor shall not discriminate against the individual because the individual is a special disabled veteran, a veteran of the Vietnam era, or other eligible veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans without discrimination based upon their disability or veterans' status in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;

(iii) Rate of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. 4211 and 4212).

(c) Listing openings. (1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate local public employment service office of the State wherein the opening occurs. Listing employment openings with the U.S. Department of Labor's America's Job Bank shall satisfy the requirement to list jobs with the local employment service office.

(2) The Contractor shall make the listing of employment openings with the local employment service office at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State public employment agency in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands of the United States, and Wake Island.

(e) Postings. (1) The Contractor shall post employment notices in conspicuous places that are available to employees and applicants for employment.

(2) The employment notices shall--

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are special disabled veterans, veterans of the Vietnam era, and other eligible veterans; and

(ii) Be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary of Labor), and provided by or through the Contracting Officer.

(3) The Contractor shall ensure that applicants or employees who are special disabled veterans are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled veteran, or may lower the posted notice so that it can be read by a person in a wheelchair).

(4) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement, or other contract understanding, that the Contractor is bound by the terms of the Act and is committed to take affirmative action to employ, and advance in employment, qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) Subcontracts. The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of \$25,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Deputy Assistant Secretary of Labor to enforce the terms, including action for noncompliance.

(End of clause)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (DEC 2001)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

(End of provision)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert "None")	Identification No.

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

- (ii) Obtain medical treatment for those affected by the material; and
- (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
- (2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
- (3) The Government is not precluded from using similar or identical data acquired from other sources.
- (End of clause)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003)

(a) Definitions. As used in this clause--

Priority chemical means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

Toxic chemical means a chemical or chemical category listed in 40 CFR 372.65.

(b) Executive Order 13148 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

- (1) The emergency planning reporting requirements of section 302 of EPCRA.
- (2) The emergency notice requirements of section 304 of EPCRA.
- (3) The list of Material Safety Data Sheets, required by section 311 of EPCRA.
- (4) The emergency and hazardous chemical inventory forms of section 312 of EPCRA.
- (5) The toxic chemical release inventory of section 313 of EPCRA, which includes the reduction and recycling information required by section 6607 of PPA.
- (6) The toxic chemical, priority chemical, and hazardous substance release and use reduction goals of sections 502 and 503 of Executive Order 13148.

(End of clause)

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

- (i) Taking appropriate personnel action against such employee, up to and including termination; or
 - (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.
- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.
- (End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

- (a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.
- (b) A Contractor-owned or -operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--
- (1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;
 - (2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
 - (3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
 - (4) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
 - (i) Major group code 10 (except 1011, 1081, and 1094.
 - (ii) Major group code 12 (except 1241).
 - (iii) Major group codes 20 through 39.
 - (iv) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(v) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.)), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(5) The facility is not located in the United States or its outlying areas.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

(End of clause)

52.225-11 BUY AMERICAN ACT--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JUN 2003)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a designated country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

North American Free Trade Agreement country means Canada or Mexico.

North American Free Trade Agreement country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country and NAFTA country construction materials.

(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: None

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material....			
Domestic construction material...			
Item 2:			
Foreign construction material....			
Domestic construction material...			

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (MAY 2002)

(a) Definitions. Construction material, designated country construction material, domestic construction material, foreign construction material, and NAFTA country construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act --Construction Materials under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country or NAFTA country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic, designated country, or NAFTA country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic, designated country, or NAFTA country construction material, and the offeror shall be required to furnish such domestic, designated country, or NAFTA country construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2003)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States and its outlying areas under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the

structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

(End of clause)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(4) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101 to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL) (JUN 1987)

Except for data contained on pages , it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this contract) in and to the technical data contained in the proposal dated , upon which this contract is based.

(End of clause)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.-

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000, whichever is less.-

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.-

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of clause)

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$_____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. \$_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States
\$ _____. This draft is drawn under Irrevocable Letter of Credit No.

_____.

[Beneficiary Agency]

By: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (APR 2003)

(a) As used in this clause--

"Contract date" means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties" means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax" means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax" means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

Local taxes includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the contract is performed wholly or partly in any of those areas.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
MAR 1995)--EFARS

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region IX. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered

by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

(Name)

(Title)

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

(End of clause)

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.

(A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).

(A) The due date for making such payments is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g.,

52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of \$1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under paragraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.

(f) Third-party deficiency reports--(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

(i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for

the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.232-35 DESIGNATION OF OFFICE FOR GOVERNMENT RECEIPT OF ELECTRONIC FUNDS TRANSFER INFORMATION (MAY 1999)

(a) As provided in paragraph (b) of the clause at 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration, the Government has designated the office cited in paragraph (c) of this clause as the office to receive the Contractor's electronic funds transfer (EFT) information, in lieu of the payment office of this contract.

(b) The Contractor shall send all EFT information, and any changes to EFT information to the office designated in paragraph (c) of this clause. The Contractor shall not send EFT information to the payment office, or any other office than that designated in paragraph (c). The Government need not use any EFT information sent to any office other than that designated in paragraph (c).

(c) Designated Office:

Name:

US Army Corps of Engineers-Alaska District
CEPOA-CT-CM (June Wohlbach)

Mailing Address:

PO Box 6898
Elmendorf AFB, AK 99506-6898

Telephone Number:

907-753-5624

Person to Contact:

June Wohlbach

Electronic Address:

june.l.wohlbach@usace.army.mil

(End of clause)

52.233-1 DISPUTES. (JUL 2002)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) Claim, as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract

terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request

for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

(End of clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least **FIFTEEN (15)** percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of clause)

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

(End of clause)

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(End of clause)

52.236-13 ACCIDENT PREVENTION (NOV 1991)

- (a) The Contractor shall provide and maintain work environments and procedures which will
- (1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;
 - (2) avoid interruptions of Government operations and delays in project completion dates; and
 - (3) control costs in the performance of this contract.
- (b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-
- (1) Provide appropriate safety barricades, signs, and signal lights;
 - (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
 - (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.
- (c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.
- (d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.
- (5) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(End of clause)

52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)

- (a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.
- (b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install

and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

(End of clause)

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

52.236-16 QUANTITY SURVEYS (APR 1984)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(b) The Government shall conduct the original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

(c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to

the Contracting Officer.

(End of clause)

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as

evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(End of clause)

52.236-22 DESIGN WITHIN FUNDING LIMITATIONS (APR 1984)

(a) The Contractor shall accomplish the design services required under this contract so as to permit the award of a contract, using standard Federal Acquisition Regulation procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in paragraph (c) below. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Government if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

(b) The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Government may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in paragraph (c) below, or the Government may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Government shall prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

(c) The estimated construction contract price for the project described in this contract is \$ 15,822,000

(End of clause)

52.236-23 RESPONSIBILITY OF THE ARCHITECT-ENGINEER CONTRACTOR (APR 1984)

(a) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all

designs, drawings, specifications, and other services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services.

(b) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of any of the services furnished under this contract.

(c) The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law.

(d) If the Contractor is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

(End of clause)

52.236-25 REQUIREMENTS FOR REGISTRATION OF DESIGNERS (JUN 2003)

Architects or engineers registered to practice in the particular professional field involved in a State, the District of Columbia, or an outlying area of the United States shall prepare or review and approve the design of architectural, structural, mechanical, electrical, civil, or other engineering features of the work.

(End of clause)

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

(End of clause)

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

- (1) the date, circumstances, and source of the order and
- (2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the

Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (APR 2003)

(a) Definitions.

"Commercial item", has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) (1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212(a)).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

(v) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

52.245-2 GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS) (JUN 2003)

(a) Government-furnished property.

(1) Overseas contracts. If this contract is to be performed outside of the United States and its outlying areas, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

(2) The delivery or performance dates for this contract are based upon the expectation that Government-furnished property suitable for use (except for property furnished "as is") will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to enable the Contractor to meet the contract's delivery or performance dates.

(3) If Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt of it, notify the Contracting Officer, detailing the facts, and, as directed by the Contracting Officer and at Government expense, either repair, modify, return, or otherwise dispose of the property. After completing the directed action and upon written request of the Contractor, the Contracting Officer shall make an equitable adjustment as provided in paragraph (h) of this clause.

(4) If Government-furnished property is not delivered to the Contractor by the required time, the Contracting Officer shall, upon the Contractor's timely written request, make a determination of the delay, if any, caused the Contractor and shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(b) Changes in Government-furnished property. (1) The Contracting Officer may, by written notice, (i) decrease the Government-furnished property provided or to be provided under this contract, or (ii) substitute other Government-furnished property for the property to be provided by the Government, or to be acquired by the Contractor for the Government, under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct regarding the removal, shipment, or disposal of the property covered by such notice.

(2) Upon the Contractor's written request, the Contracting Officer shall make an equitable adjustment to the contract in accordance with paragraph (h) of this clause, if the Government has agreed in the Schedule to make the property available for performing this contract and there is any--

(i) Decrease or substitution in this property pursuant to subparagraph (b)(1) of this clause; or

(ii) Withdrawal of authority to use this property, if provided under any other contract or lease.

(c) Title in Government property. (1) The Government shall retain title to all Government-furnished property.

(2) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause. However, special tooling accountable to this contract is subject to the provisions of the Special Tooling clause and is not subject to the provisions of this clause. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(3) Title to each item of facilities and special test equipment acquired by the Contractor for the Government under this contract shall pass to and vest in the Government when its use in performing this contract commences or when the Government has paid for it, whichever is earlier, whether or not title previously vested in the Government.

(4) If this contract contains a provision directing the Contractor to purchase material for which the Government will reimburse the Contractor as a direct item of cost under this contract--

(i) Title to material purchased from a vendor shall pass to and vest in the Government upon the vendor's delivery of such material; and

(ii) Title to all other material shall pass to and vest in the Government upon--

(A) Issuance of the material for use in contract performance;

(B) Commencement of processing of the material or its use in contract performance; or

(C) Reimbursement of the cost of the material by the Government, whichever occurs first.

(d) Use of Government property. The Government property shall be used only for performing this contract, unless otherwise provided in this contract or approved by the Contracting Officer.

(e) Property administration. (1) The Contractor shall be responsible and accountable for all Government property provided under this contract and shall comply with Federal Acquisition Regulation (FAR) Subpart 45.5, as in effect on the date of this contract.

(2) The Contractor shall establish and maintain a program for the use, maintenance, repair, protection, and preservation of Government property in accordance with sound industrial practice and the applicable provisions of Subpart 45.5 of the FAR.

(3) If damage occurs to Government property, the risk of which has been assumed by the Government under this contract, the Government shall replace the items or the Contractor shall make such repairs as the Government directs. However, if the Contractor cannot effect such repairs within the time required, the Contractor shall dispose of the property as directed by the Contracting Officer. When any property for which the Government is responsible is replaced or repaired, the Contracting Officer shall make an equitable adjustment in accordance with paragraph (h) of this clause.

(4) The Contractor represents that the contract price does not include any amount for repairs or replacement for which the Government is responsible. Repair or replacement of property for which the Contractor is responsible shall be accomplished by the Contractor at its own expense.

(f) Access. The Government and all its designees shall have access at all reasonable times to the premises in which any Government property is located for the purpose of inspecting the Government property.

(g) Risk of loss. Unless otherwise provided in this contract, the Contractor assumes the risk of, and shall be responsible for, any loss or destruction of, or damage to, Government property upon its delivery to the Contractor or upon passage of title to the Government under paragraph (c) of this clause. However, the Contractor is not responsible for reasonable wear and tear to Government property or for Government property properly consumed in performing this contract.

(h) Equitable adjustment. When this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause. When appropriate, the Contracting Officer may initiate an equitable adjustment in favor of the Government. The right to an equitable adjustment shall be the Contractor's exclusive remedy. The Government shall not be liable to suit for breach of contract for--

- (1) Any delay in delivery of Government-furnished property;
 - (2) Delivery of Government-furnished property in a condition not suitable for its intended use;
 - (3) A decrease in or substitution of Government-furnished property; or
 - (4) Failure to repair or replace Government property for which the Government is responsible.
- (i) Final accounting and disposition of Government property. Upon completing this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property (including any resulting scrap) not consumed in performing this contract or delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid to the Government as the Contracting Officer directs.
- (j) Abandonment and restoration of Contractor's premises. Unless otherwise provided herein, the Government--
- (1) May abandon any Government property in place, at which time all obligations of the Government regarding such abandoned property shall cease; and
 - (2) Has no obligation to restore or rehabilitate the Contractor's premises under any circumstances (e.g., abandonment, disposition upon completion of need, or upon contract completion). However, if the Government-furnished property (listed in the Schedule or specifications) is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (h) of this clause may properly include restoration or rehabilitation costs.
- (k) Communications. All communications under this clause shall be in writing.
- (l) Overseas contracts. If this contract is to be performed outside of the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.
- (End of clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

- (a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.
 - (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
 - (c) Government inspections and tests are for the sole benefit of the Government and do not--
- (1) Relieve the Contractor of responsibility for providing adequate quality control measures;

- (2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;
- (3) Constitute or imply acceptance; or
- (4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.
- (d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.
- (e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.
- (f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.
- (h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

(End of clause)

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for

(i) the affected portions of the existing contract requirement and

(ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

- (5) A prediction of any effects the proposed change would have on collateral costs to the agency.
- (6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.
- (7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing.

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by

- (i) 45 percent for fixed-price contracts or
- (ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

- (i) Accept the VECP;
- (ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and
- (iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering-- Construction clause of contract, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations." If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work

terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under subparagraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of--

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (f)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

(End of clause)

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

(v) floods,

(vi) epidemics,

(vii) quarantine restrictions,

(viii) strikes,

(ix) freight embargoes,

(x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(6) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) “Arising out of a contract with the DoD” means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) “Conviction of fraud or any other felony” means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) “Date of conviction” means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

(a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.

(b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.

(7) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)

(a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.

(b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

(End of clause)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

(End of clause)

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

(End of clause)

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities*, as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business*, when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

252.222-7000 RESTRICTIONS ON EMPLOYMENT OF PERSONNEL (MAR 2000)

(a) The Contractor shall employ, for the purpose of performing that portion of the contract work in Alaska, individuals who are residents thereof and who, in the case of any craft or trade, possess or would be able to acquire promptly the necessary skills to perform the contract.

(b) The Contractor shall insert the substance of this clause, including this paragraph (b), in each subcontract awarded under this contract.

(End of clause)

252.223-7001 HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")

ACT

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employees has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2.1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

(1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

(2) "Toxic or hazardous materials" means:

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

252.226-7001 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES, AND HAWAIIAN SMALL BUSINESS CONCERNS (OCT 2003)

(a) Definitions. As used in this clause--

Indian means any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

Indian organization means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C. chapter 17.

Indian-owned economic enterprise means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

Indian tribe means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452(c).

Interested party means a contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

Native Hawaiian small business concern means an entity that is --

(1) A small business concern as defined in section 3 of the Small Business Act (15 U.S.C. 632) and relevant implementing regulations; and

(2) Owned and controlled by a Native Hawaiian as defined in 25 U.S.C. 4221(9).

(b) The Contractor shall use its best efforts to give Indian organizations, Indian-owned economic enterprises, and Native Hawaiian small business concerns the maximum practicable opportunity to participate in the subcontracts it awards, to the fullest extent consistent with efficient performance of the contract.

(c) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status.

(d) In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to--

(1) For matters relating to Indian organizations or Indian-owned economic enterprises: U.S. Department of the Interior, Bureau of Indian Affairs, Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street NW, MS-2626-MIB, Washington, DC 20240-4000. The BIA will determine the eligibility and will notify the Contracting Officer.

(2) For matters relating to Native Hawaiian small business concerns: Department of Hawaiian Home Lands, PO Box 1879, Honolulu, HI 96805. The Department of Hawaiian Home Lands will determine the eligibility and will notify the Contracting Officer.

(e) No incentive payment will be made--

(1) While a challenge is pending; or

(2) If a subcontractor is determined to be an ineligible participant.

(f)(1) The Contractor, on its own behalf or on behalf of a subcontractor at any tier, may request an incentive payment in accordance with this clause.

(2) The incentive amount that may be requested is 5 percent of the estimated cost, target cost, or fixed price included in the subcontract at the time of award to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(3) In the case of a subcontract for commercial items, the Contractor may receive an incentive payment only if the subcontracted items are produced or manufactured in whole or in part by an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(4) The Contractor has the burden of proving the amount claimed and shall assert its request for an incentive payment prior to completion of contract performance.

(5) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the estimated cost, target cost, or fixed price included in the subcontract awarded to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(6) If the Contractor requests and receives an incentive payment on behalf of a subcontractor, the Contractor is obligated to pay the subcontractor the incentive amount.

(g) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts exceeding \$500,000 for which further subcontracting opportunities may exist.

(End of clause)

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

(End of clause)

252.227-7023 DRAWINGS AND OTHER DATA TO BECOME PROPERTY OF GOVERNMENT. (MAR 1979)

All designs, drawings, specifications, notes and other works developed in the performance of this contract shall become the sole property of the Government and may be used on any other design or construction without additional compensation to the Contractor. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. 201(b). With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish all retained works on the request of the Contracting Officer. Unless otherwise provided in this contract, the Contractor shall have the right to retain copies of all works beyond such period.

(End of clause)

252.227-7024 NOTICE AND APPROVAL OF RESTRICTED DESIGNS (APR 1984)

In the performance of this contract, the Contractor shall, to the extent practicable, make maximum use of structures, machines, products, materials, construction methods, and equipment that are readily available through Government or competitive commercial channels, or through standard or proven production techniques, methods, and processes. Unless approved by the Contracting Officer, the Contractor shall not produce a design or specification that requires in this construction work the use of structures, products, materials, construction equipment, or processes that are known by the Contractor to be available only from a sole source. The Contractor shall promptly report any such design or specification to the Contracting Officer and give the reason why it is considered necessary to so restrict the design or specification.

(End of clause)

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

(End of clause)

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAY 2002)

(a) Definitions. As used in this clause --

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

- (1) U.S.-flag vessels are not available for timely shipment;
 - (2) The freight charges are inordinately excessive or unreasonable; or
 - (3) Freight charges are higher than charges to private persons for transportation of like goods.
- (d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

- (1) Type, weight, and cube of cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;
- (6) Prime contract number; and
- (7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:

- (1) Prime contract number;
- (2) Name of vessel;
- (3) Vessel flag of registry;
- (4) Date of loading;
- (5) Port of loading;
- (6) Port of final discharge;
- (7) Description of commodity;
- (8) Gross weight in pounds and cubic feet if available;
- (9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
-----	-----	-----
-----	-----	-----
-----	-----	-----
TOTAL	-----	-----

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

SECTION 00700a

General Wage Decision AK030001

(Dated (06/13/2003)

Modification Record:

No.	Publication Date
0	03/01/2002

General Wage Decision AK030006

(Dated (06/13/2003)

Modification Record:

No.	Publication Date
0	03/01/2002

BRS Document Viewer
General Decision Number AK030001

General Decision Number AK030001
Superseded General Decision No. AK020001
State: Alaska Construction Type:
BUILDING
HEAVY
County(ies):
STATEWIDE

BUILDING AND HEAVY CONSTRUCTION PROJECTS (does not include
residential construction consisting of single family homes
and apartments up to and including 4 stories)

Modification Number Publication Date
0 06/13/2003

COUNTY(ies):

STATEWIDE

ASBE0097A 01/01/2003

	Rates	Fringes
ASBESTOS WORKERS/INSULATORS (includes application of all insulating materials protective coverings, coatings and finishings to all types of mechanical systems)	27.83	7.12

ASBE0097B 04/01/2002

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (includes preparation, wetting, stripping, removal scrapping, vacuming, bagging, and disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)	24.30	8.11

BOIL0502A 10/01/2002

	Rates	Fringes
BOILERMAKERS	34.35	13.55

BRAK0001A 07/01/2002

	Rates	Fringes
BRICKLAYERS, BLOCKLAYERS, STONEMASON, MARBLE MASON, TILE SETTER & TERRAZZO WORKER	28.91	11.80
TILE & TERRAZZO FINISHERS	23.48	11.80

CARP1243A 07/01/2002

	Rates	Fringes
NORTH OF THE 63RD PARALLEL CARPENTERS/LATHER/DRYWALL APPLICATOR	30.80	11.60
DEWALT OR SIMILAR TYPE SAW OPERATORS; SAW FILERS; NAIL- ING MACHINE OPERATORS; POWER- ACTUATED TOOL OPERATOR; MAR- LITE AND ACOUSTICAL APPLICATOR		

FLOOR WORKERS; FIRE OR FLOOD REPAIR WORK	31.37	11.60
MILLWRIGHTS	31.75	11.60

CARP1281A 07/01/2002		
	Rates	Fringes
SOUTH OF 63RD PARALLEL CARPENTERS & DRYWALLERS	28.10	12.20
ACOUSTICAL APPLICATOR AND LATHERS	28.10	12.20
MILLWRIGHTS	28.80	12.20

CARP2520A 08/01/2002		
	Rates	Fringes
DIVERS:		
WORKING	61.94	12.20
STAND-BY	30.97	12.20
TENDER	29.97	12.20
PILEDRIVERS:		
WELDER	28.40	12.20
CARPENTER	27.80	12.20
SHEET PILE STABBER	27.64	12.20
PILEDRIVER; SKIFF OPERATOR AND RIGGER	26.64	12.20

ELEC1547A 05/05/2003		
	Rates	Fringes
ELECTRICIANS; TECHNICIANS	32.42	3%+11.35
CABLE SPLICERS	34.17	3%+11.35

ELEC1547B 01/01/2003		
	Rates	Fringes
LINEMEN; EQUIPMENT OPERATORS; TECHNICIAN	34.10	3%+14.05
CABLE SPLICER	32.10	3%+14.05
POWDERMAN	35.85	3%+14.05
TREE TRIMMER	22.90	3%+14.05

ELEV0019A 01/01/2003		
	Rates	Fringes
ELEVATOR MECHANICS	36.105	9.355+a
FOOTNOTE: a. Employer contributes 8% of the basic hourly rate for over 5 year's service and 6% of the basic hourly rate for 6 months to 5 years' of service as vacation paid credit. Seven paid holidays: New Year's Day; Memorial Day; Independence Day; Labor Day, Thanksgiving Day; Friday after Thanksgiving and Christmas Day		

ENGI0302L 07/01/2002		
	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	31.71	10.01
GROUP 1A	33.25	10.01
GROUP 2	31.04	10.01
GROUP 3	30.41	10.01
GROUP 4	24.99	10.01

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt Roller; Back Filler; Barrier Machine (Zipper); Batch Plant Operator: Batch and Mixer over 200 yds.; Beltcrete with power pack and similar conveyors; Bending Machine; Boat Coxwains; Bulldozers; Cableways, Highlines and Cablecars; Cleaning Machine; Coating Machine; Concrete Hydro Blaster; Cranes-45 tons and under or 150 foot boom and under (including jib and attachments): (a) Shovels, Backhoes, Draglines, Clamshells; Gradalls-3 yards and under; (b) Hydralifts or Transporters, all track or truck type, (c) Derricks; Crushers; Deck Winches-Double Drum; Ditching or Trenching Machine (16 inch or over); Drilling Machines, core, cable, rotary and exploration; Finishing Machine Operator, concrete paving, Laser Screed, sidewalk, curb and gutter machine; Helicopters; Hover Craft, Flex Craft, Loadmaster, Air Cushion, All Terrain Vehicle, Rollagon, Bargecable, Nodwell Sno Cat; Hydro Ax: Feller Buncher and similar; Loaders: Forklifts with power boom and swing attachment, Overhead and front end, 2 1/2 yards through 5 yards, Loaders with forks or pipe clamps, Loaders, elevating belt type, Euclid and similar types; Mechanics, Bodyman; Micro Tunneling Machine; Mixers: Mobile type w/hoist combination; Motor Patrol Grader; Mucking Machines: Mole, Tunnel Drill, Horizontal/Directional Drill Operator, and/or Shield; Operator on Dredges; Piledriver Engineers, L. B. Foster, Puller or similar Paving Breaker; Power Plant, Turbine Operator, 200 k.w. and over (power plants or combination of power units over 300 k.w.); Sauerman-Bagley; Scrapers-through 40 yards; Service Oiler/Service Engineer; Sidebooms-under 45 tons; Shot Blast Machine; Spreaders, Blaw Knox, Cedarapids, Barber Greene, Slurry Machine; Sub-grader (Gurries, C.M.I. and C.M.I. Roto Mills and similar types); Tack tractor; Truck mounted Concrete Pumps, Conveyor, Creter; Water Kote Machine; Unlicensed off road hauler

GROUP 1A: Cranes-over 45 tons or 150 foot (including jib and attachments): (a) Shovels, backhoes, draglines, clamshells-over 3 yards, (b) Tower cranes; Loaders over 5 yds.; Motor Patrol Grader (finish: when finishing to final graders and/or to hubs, or for asphalt); Power Plants: 1000 k.w. and over; Quad; Screed; Sidebooms over 45 tons; Slip Form Paver C.M.I. and similar types; Scrapers over 40 yards

GROUP 2: Batch Plant Operators: Batch and Mixer 200 yds. per hour and under; Boiler-fireman; Cement Hog and Concrete Pump Operator; Conveyors (except as listed in group 1); Hoist on steel erection; Towermobiles and Air Tuggers; Horizontal/Directional Drill Locator; Loaders, Elevating Grader, Dumor and similar; Locomotives: rod and geared engines; Mixers; Screening, Washing Plant; Sideboom (cradling rock drill regardless of size); Skidder; Trenching Machine under 16 inches.

GROUP 3: "A" Frame Trucks, Deck Winches: single power drum; Bombardier (tack or tow rig); Boring Machine; Brooms-power; Bump Cutter; Compressor; Farm tractor; Forklift, industrial type; Gin Truck or Winch Truck with poles when used for hoisting; Grade Checker and Stake Hopper; Hoist, Air Tuggers, Elevators; Loaders: (a) Elevating-Athey, Barber Green and similar types
(b) Forklifts or Lumber Carrier (on construction job site)
(c) Forklifts with Tower
(d) Overhead and Front-end, under 2 1/2 yds.

Locomotives: Dinkey (air, steam, gas and electric) Speeders;

Mechanics (light duty); Mixers: Concrete Mixers and Batch 200 yds. per hour and under; Oil, Blower Distribution; Post Hole Diggers, mechanical; Pot Fireman (power agitated); Power Plant, Turbine Operator, under 300 k.w.; Pumps-water; Rig oiler/assistant engineer, over 45 ton, over 3 yards or over 150 foot boom; Roller-other than Plantmix; Saws, concrete; Straightening Machine; Tow Tractor

GROUP 4: Rig Oiler/Assistant Engineer (Advances to Group III if over 45 tons or 3 yards or 150 ft. boom); Swamper (on trenching machines or shovel type equipment); Spotter; Steam Cleaner
 FOOTNOTE: Groups 1-4 receive 10% premium while performing tunnel or underground work.

 IRON0751A 08/01/2002

	Rates	Fringes
IRONWORKERS:		
BRIDGE, STRUCTURAL,		
ORNAMENTAL, REINFORCING		
MACHINERY MOVER, RIGGER,		
SHEETER, STAGE RIGGER,		
BENDER OPERATOR	27.50	13.60
GUARDRAIL LAYOUT MAN	24.74	13.35
FENCE, BARRIER AND		
GUARDRAIL INSTALLERS	24.00	13.35
HELICOPTER, TOWER	28.50	13.60

 LABO0341A 09/01/2002

	Rates	Fringes
LABORERS:		
GROUP 1	24.49	11.50
GROUP 2	25.24	11.50
GROUP 3	25.89	11.50
GROUP 3A	27.49	11.50
GROUP 4	16.84	11.50

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Workers (shovelman, plant crew); Brush Cutters; Camp Maintenance Laborer; Carpenter Tenders; Choke Setters, Hook Tender, Rigger, Signalman; Concrete Laborer (curb and gutter, chute handler, grouting, curing, screeding); Crusher Plant Laborer; Demolition Laborer; Ditch Diggers; Dump Man; Environmental Laborer (asbestos (limited to nonmechanical systems), hazardous and toxic waste, oil spill); Fence Installer; Fire Watch Laborer; Flagman; Form Strippers; General Laborer; Guardrail Laborer, Bridge Rail Installers; Hydro-Seeder Nozzleman; Laborers (building); Landscape or Planter; Material Handlers; Pneumatic or Power Tools; Portable or Chemical Toilet Serviceman; Pump Man or Mixer Man; Railroad Track Laborer; Sandblast, Pot Tender; Saw Tenders; Scaffold Building and Erecting; Slurry Work; Stake Hopper; Steam Point or Water Jet Operator; Steam Cleaner Operator; Tank Cleaning; Utiliwalk and Utilidor Laborer; Watchman (construction projects); Window Cleaner

GROUP 2: Burning and Cutting Torch; Cement or Lime Dumper or Handler (sack or bulk); Choker Splicer; Chucktender (wagon, airtrack and hydraulic drills); Concrete Laborers (power buggy, concrete saws, pumpcrete nozzleman, vibratorman); Environmental Laborer (marine work); Foam Gun or Foam Machine Operator; Green

Cutter (dam work); Guardrail Machine Operator; Gunnite Operator; Hod Carriers; Jackhammer or Pavement Breakers (more than 45 pounds); Mason Tender and Mud Mixer (sewer work); Plasterer, Bricklayer and Cement Finisher Tenders; Power Saw Operator; Railroad Switch Layout Laborer; Sandblaster; Sewer Caulkers; Sewer Plant Maintenance Man; Thermal Plastic Applicator; Timber Faller, chain saw operator, filer; Timberman

GROUP 3: Bit Grinder; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); High Rigger and tree topper; Higher Scaler; Pioneer Drilling and Drilling Off Tugger (all type drills); Powderman; Slurry Seal Squeegee Man

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Grade checker (setting or transferring of grade marks, line and grade); Pipelayers

GROUP 4: Final Building Cleanup

TUNNELS, SHAFTS, AND RAISES

GROUP 1	26.94	11.50
GROUP 2	27.76	11.50
GROUP 3	28.48	11.50
GROUP 3A	30.24	11.50

TUNNELS, SHAFTS, AND RAISES CLASSIFICATIONS

GROUP 1: Brakeman; Muckers; Nippers; Topman and Bull Gang; Tunnel Track Laborer

GROUP 2: Burning and Cutting Torch; Concrete Laborers; Jackhammers; Laser Instrument Operators; Nozzleman, Pumpcrete or Shotcrete; Pipelayers.

GROUP 3: Miner; Miner; Retimberman

GROUP 3A: Powderman

Tunnel shaft and raise rates only apply to workers regularly employed inside a tunnel portal or shaft collar.

PAIN1140C 09/01/2002

	Rates	Fringes
SOUTH OF THE 63RD PARALLEL PAINTERS		
Brush, Roller, Sign	22.61	10.37
Paper and Vinyl, Swing Stage, Taper/Drywall, Structural Steel	23.01	10.37
Spray-Sand/Blast, Epoxy and Tar Applicator	23.61	10.37
Steeple Jack & Tower	24.61	10.37

PAIN1140E 09/01/2002

	Rates	Fringes
SOFT FLOOR LAYERS	24.80	7.85

PAIN1140F 01/01/2003

	Rates	Fringes
SOUTH OF THE 63RD PARALLEL GLAZIERS	26.60	10.00

PAIN1555C 04/01/2003

	Rates	Fringes
NORTH OF THE 63RD PARALLEL PAINTERS:		

BRUSH, BUFFER OPERATOR, FLOOR- COVERER, POT TENDER, ROLL SPRAY, WALLCOVERER	27.00	10.97
HAZARDOUS MATERIAL APPLICATOR, LEAD BASED PAINT ABATEMENT, RADON MITIGATION, SANDBLAST, STRUCTURAL STEEL, TAPING, TEXTURING	27.50	10.97

PAIN1555E 01/01/2003		
	Rates	Fringes
NORTH OF THE 63RD PARALLEL GLAZIERS	26.62	10.05

PLAS0867A 02/01/2003		
	Rates	Fringes
NORTH OF THE 63RD PARALLEL: CEMENT MASONS	29.26	9.95
PLASTERERS	30.74	9.95
SOUTH OF THE 63RD PARALLEL CEMENT MASONS	29.01	9.95
PLASTERERS	30.49	9.95

PLUM0262C 01/01/2003		
	Rates	Fringes
East of the 141st Meridian PLUMBERS; STEAMFITTERS	28.59	10.55

PLUM0367B 07/01/2002		
	Rates	Fringes
South of the 63rd Parallel PLUMBERS; STEAMFITTERS	30.30	11.15

PLUM0375A 07/01/2002		
	Rates	Fringes
North of the 63rd Parallel PLUMBERS; STEAMFITTERS	33.51	11.15

PLUM0669A 04/01/2003		
	Rates	Fringes
SPRINKLER FITTER	36.60	8.60

ROOF0190A 09/27/2002		
	Rates	Fringes
NORTH OF THE 63RD PARALLEL: ROOFERS	29.43	10.92
SOUTH OF THE 63RD PARALLEL ROOFERS	27.43	10.92

SHEE0023A 01/01/2003		
	Rates	Fringes
South of the 63rd Parallel: SHEET METAL WORKERS	30.55	11.24

SHEE0023B 04/01/2003		
	Rates	Fringes
North of the 63rd Parallel:		

SHEET METAL WORKERS

33.39

12.14

TEAM0959A 09/01/2002

	Rates	Fringes
TRUCK DRIVERS:		
GROUP 1	31.40	9.57
GROUP 1A	32.45	9.57
GROUP 2	30.35	9.57
GROUP 3	29.67	9.57
GROUP 4	29.20	9.57
GROUP 5	28.56	9.57
GROUP 1: Semi with Double Box Mixer; Dump Trucks (including rockbuggy and trucks with pups) over 40 yards up to and including 60 yards; Deltas, Commanders, Rollogans and similar equipment when pulling sleds, trailers or similar equipment; Boat Coxswain; Lowboys including attached trailers and jeeps, up to and including 12 axles; Ready-mix over 12 yards up to and including 15 yards)		
GROUP 1A: Dump Trucks (including Rockbuggy and Trucks with pups) over 60 yards up to and including 100 yards		
GROUP 2: Turn-O-Wagon or DW-10 not self-loading; All Deltas, Commanders, Rollogans, and similar equipment; Mechanics; Tireman, heavy duty; Dump Trucks (including Rockbuggy and Trucks with pups) over 20 yards up to and including 40 yards; Lowboys including attached trailers and jeeps up to and including 8 axles; Super vac truck/cacasco truck/heat stress truck; Ready-mix over 7 yards up to and including 12 yards		
GROUP 3: Dump Trucks (including Rockbuggy and Trucks with pups) over 10 yards up to and including 20 yards; batch trucks 8 yards and up; Oil distributor drivers; Greaser; Water Wagon (when pulled by Euclid or similar type equipment); Partsman		
GROUP 4: Buggymobile; Semi or Truck and trailer; Dumpster; Tireman (light duty); Dump Trucks (including Rockbuggy and Truck with pups) up to and including 10 yards; Track Truck Equipment; Stringing Truck; Fuel Truck; Fuel Handler with truck; Grease Truck; Flat Beds, dual rear axle; Hyster Operators (handling bulk aggregate); Lumber Carrier; Water Wagon, semi; Water Wagon, dual axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame manufactured rating over 5 tons; Bull Lifts and Fork Lifts with Power Boom and Swing attachments, over 5 tons; Front End Loader with Forks; Bus Operator over 30 passengers; All Terrain Vehicles; Boom Truck/Knuckle Truck over 5 tons; Foam Distributor Truck/dual axle; Hydro-seeders, dual axle; Vacuum Trucks, Truck Vacuum Sweepers; Vacuum Trucks, Truck Vacuum Sweepers; Loadmaster (air and water); Air Cushion or similar type vehicle; Fire Truck; Combination Truck-fuel and grease; Compactor (when pulled by rubber tired equipment); Rigger (air/water/oilfield); Ready Mix, up to and including 7 yards		
GROUP 5: Gravel Spreader Box Operator on Truck; Flat Beds, single rear axle; Boom Truck/Knuckle Truck up to and including 5 tons; Pickups (Pilot Cars and all light duty vehicles); Water Wagon, single axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame, manufactured rating 5 tons and under; Bull Lifts and Fork Lifts (fork lifts with power broom and swing attachments up to and including 5 tons); Buffer Truck; Tack Truck; Bus Operators (up to 30 passengers); Farm type Rubber Tired Tractor (when material handling or pulling wagons on a		

construction project); Foam Distributor, single axle; Hydro-Seeders, single axle; Team Drivers (horses, mules and similar equipment); Rigger (warehouse operation); Fuel Handler (station/bulk attendant); Batch Truck, up to and including 7 yards

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review

Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U. S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

BRS Document Viewer
General Decision Number AK030006

General Decision Number AK030006
Superseded General Decision No. AK020006
State: Alaska Construction Type:
HIGHWAY
County(ies):
ALEUTIAN ISLAND KOBUK SEWART
ANCHORAGE KODIAK ISLAND VALDEZ-CORDOVA
BETHEL KUSKOKWIM WADE HAMPTON
BRISTOL BAY MATANUSKA-SUSIT WHITTIER
DILLINGHAM NOME YUKON-KOYUKUK
FAIRBANKS NORTH NORTH SLOPE
KENAI PENSULIA SE FAIRBANKS
HIGHWAY CONSTRUCTION PROJECTS
Modification Number Publication Date
0 06/13/2003

COUNTY(ies):
ALEUTIAN ISLAND KOBUK SEWART
ANCHORAGE KODIAK ISLAND VALDEZ-CORDOVA
BETHEL KUSKOKWIM WADE HAMPTON
BRISTOL BAY MATANUSKA-SUSIT WHITTIER
DILLINGHAM NOME YUKON-KOYUKUK
FAIRBANKS NORTH NORTH SLOPE
KENAI PENSULIA SE FAIRBANKS
CARP1243B 07/01/2002

	Rates	Fringes
NORTH OF THE 63RD PARALLEL CARPENTERS	30.80	11.60
DEWALT OR SIMILAR TYPE SAW OPERATORS; SAW FILERS; NAIL- ING MACHINE OPERATORS; POWER- ACTUATED TOOL OPERATOR	31.37	11.60

CARP1281C 07/01/2002

	Rates	Fringes
SOUTH OF 63RD PARALLEL CARPENTERS	28.10	12.20

CARP2520B 08/01/2002

	Rates	Fringes
PILED RIVERMEN:		
WELDER	28.40	12.20
CARPENTER	27.80	12.20
SHEET PILE STABBER	27.64	12.20
PILED RIVERMAN; SKIFF OPERATOR AND RIGGER	26.64	12.20

ELEC1547A 05/05/2003

	Rates	Fringes
ELECTRICIANS; TECHNICIANS	32.42	3%+11.35
CABLE SPLICERS	34.17	3%+11.35

ELEC1547B 01/01/2003

	Rates	Fringes
LINEMEN; EQUIPMENT OPERATORS;		
TECHNICIAN	34.10	3%+14.05
CABLE SPLICER	32.10	3%+14.05
POWDERMAN	35.85	3%+14.05
TREE TRIMMER	22.90	3%+14.05

 ENGI0302L 07/01/2002

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	31.71	10.01
GROUP 1A	33.25	10.01
GROUP 2	31.04	10.01
GROUP 3	30.41	10.01
GROUP 4	24.99	10.01

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt Roller; Back Filler; Barrier Machine (Zipper); Batch Plant Operator: Batch and Mixer over 200 yds.; Beltcrete with power pack and similar conveyors; Bending Machine; Boat Coxwains; Bulldozers; Cableways, Highlines and Cablecars; Cleaning Machine; Coating Machine; Concrete Hydro Blaster; Cranes-45 tons and under or 150 foot boom and under (including jib and attachments): (a) Shovels, Backhoes, Draglines, Clamshells; Gradalls-3 yards and under; (b) Hydralifts or Transporters, all track or truck type, (c) Derricks; Crushers; Deck Winches-Double Drum; Ditching or Trenching Machine (16 inch or over); Drilling Machines, core, cable, rotary and exploration; Finishing Machine Operator, concrete paving, Laser Screed, sidewalk, curb and gutter machine; Helicopters; Hover Craft, Flex Craft, Loadmaster, Air Cushion, All Terrain Vehicle, Rollagon, Bargecable, Nodwell Sno Cat; Hydro Ax: Feller Buncher and similar; Loaders: Forklifts with power boom and swing attachment, Overhead and front end, 2 1/2 yards through 5 yards, Loaders with forks or pipe clamps, Loaders, elevating belt type, Euclid and similar types; Mechanics, Bodyman; Micro Tunneling Machine; Mixers: Mobile type w/hoist combination; Motor Patrol Grader; Mucking Machines: Mole, Tunnel Drill, Horizontal/Directional Drill Operator, and/or Shield; Operator on Dredges; Piledriver Engineers, L. B. Foster, Puller or similar Paving Breaker; Power Plant, Turbine Operator, 200 k.w. and over (power plants or combination of power units over 300 k.w.); Sauerman-Bagley; Scrapers-through 40 yards; Service Oiler/Service Engineer; Sidebooms-under 45 tons; Shot Blast Machine; Spreaders, Blaw Knox, Cedarapids, Barber Greene, Slurry Machine; Sub-grader (Gurries, C.M.I. and C.M.I. Roto Mills and similar types); Tack tractor; Truck mounted Concrete Pumps, Conveyor, Creter; Water Kote Machine; Unlicensed off road hauler

GROUP 1A: Cranes-over 45 tons or 150 foot (including jib and attachments): (a) Shovels, backhoes, draglines, clamshells-over 3 yards, (b) Tower cranes; Loaders over 5 yds.; Motor Patrol Grader (finish: when finishing to final graders and/or to hubs, or for asphalt); Power Plants: 1000 k.w. and over; Quad; Screed; Sidebooms over 45 tons; Slip Form Paver C.M.I. and similar types; Scrapers over 40 yards

GROUP 2: Batch Plant Operators: Batch and Mixer 200 yds. per hour and under; Boiler-fireman; Cement Hog and Concrete Pump Operator; Conveyors (except as listed in group 1); Hoist on

steel erection; Towermobiles and Air Tuggers;
Horizontal/Directional Drill Locator; Loaders, Elevating
Grader, Dumor and similar; Locomotives: rod and geared engines;
Mixers; Screening, Washing Plant; Sideboom (cradling rock drill
regardless of size); Skidder; Trenching Machine under 16 inches.

GROUP 3: "A" Frame Trucks, Deck Winches: single power
drum; Bombardier (tack or tow rig); Boring Machine; Brooms-power;
Bump Cutter; Compressor; Farm tractor; Forklift, industrial type;
Gin Truck or Winch Truck with poles when used for hoisting; Grade
Checker and Stake Hopper; Hoist, Air Tuggers, Elevators;
Loaders: (a) Elevating-Athey, Barber Green and similar types

(b) Forklifts or Lumber Carrier (on construction job site)

(c) Forklifts with Tower

(d) Overhead and Front-end, under 2 1/2 yds.

Locomotives: Dinkey (air, steam, gas and electric) Speeders;
Mechanics (light duty); Mixers: Concrete Mixers and Batch 200
yds. per hour and under; Oil, Blower Distribution; Post Hole
Diggers, mechanical; Pot Fireman (power agitated); Power Plant,
Turbine Operator, under 300 k.w.; Pumps-water; Rig
oiler/assistant engineer, over 45 ton, over 3 yards or over 150
foot boom; Roller-other than Plantmix; Saws, concrete;
Straightening Machine; Tow Tractor

GROUP 4: Rig Oiler/Assistant Engineer (Advances to Group III if
over 45 tons or 3 yards or 150 ft. boom); Swamper (on trenching
machines or shovel type equipment); Spotter; Steam Cleaner

FOOTNOTE: Groups 1-4 receive 10% premium while performing tunnel
or underground work.

IRON0751A 08/01/2002

	Rates	Fringes
IRONWORKERS:		
BRIDGE, STRUCTURAL,		
ORNAMENTAL, REINFORCING		
MACHINERY MOVER, RIGGER,		
SHEETER, STAGE RIGGER,		
BENDER OPERATOR	27.50	13.60
GUARDRAIL LAYOUT MAN	24.74	13.35
FENCE, BARRIER AND		
GUARDRAIL INSTALLERS	24.00	13.35
HELICOPTER, TOWER	28.50	13.60

LABO0341D 09/01/2002

	Rates	Fringes
LABORERS:		
GROUP 1	24.49	11.50
GROUP 2	25.24	11.50
GROUP 3	25.89	11.50
GROUP 3A	27.49	11.50
GROUP 4	16.84	11.50

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Workers (shovelman, plant crew); Brush
Cutters; Camp Maintenance Laborer; Carpenter Tenders; Choke
Setters, Hook Tender, Rigger, Signalman; Concrete Laborer (curb
and gutter, chute handler, grouting, curing, screeding); Crusher
Plant Laborer; Demolition Laborer; Ditch Diggers; Dump Man;
Environmental Laborer (asbestos (limited to nonmechanical
systems), hazardous and toxic waste, oil spill); Fence Installer;

Fire Watch Laborer; Flagman; Form Strippers; General Laborer; Guardrail Laborer, Bridge Rail Installers; Hydro-Seeder Nozzleman; Laborers (building); Landscape or Planter; Material Handlers; Pneumatic or Power Tools; Portable or Chemical Toilet Serviceman; Pump Man or Mixer Man; Railroad Track Laborer; Sandblast, Pot Tender; Saw Tenders; Scaffold Building and Erecting; Slurry Work; Stake Hopper; Steam Point or Water Jet Operator; Steam Cleaner Operator; Tank Cleaning; Utiliwalk and Utilidor Laborer; Watchman (construction projects); Window Cleaner

GROUP 2: Burning and Cutting Torch; Cement or Lime Dumper or Handler (sack or bulk); Choker Splicer; Chucktender (wagon, airtrack and hydraulic drills); Concrete Laborers (power buggy, concrete saws, pumpcrete nozzleman, vibratorman); Environmental Laborer (marine work); Foam Gun or Foam Machine Operator; Green Cutter (dam work); Guardrail Machine Operator; Gunnite Operator; Hod Carriers; Jackhammer or Pavement Breakers (more than 45 pounds); Mason Tender and Mud Mixer (sewer work); Plasterer, Bricklayer and Cement Finisher Tenders; Power Saw Operator; Railroad Switch Layout Laborer; Sandblaster; Sewer Caulkers; Sewer Plant Maintenance Man; Thermal Plastic Applicator; Timber Faller, chain saw operator, filer; Timberman

GROUP 3: Bit Grinder; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); High Rigger and tree topper; Higher Scaler; Pioneer Drilling and Drilling Off Tugger (all type drills); Powderman; Slurry Seal Squeegee Man

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Grade checker (setting or transferring of grade marks, line and grade); Pipelayers

GROUP 4: Final Building Cleanup

TUNNELS, SHAFTS, AND RAISES

GROUP 1	26.94	11.50
GROUP 2	27.76	11.50
GROUP 3	28.48	11.50
GROUP 3A	30.24	11.50

TUNNELS, SHAFTS, AND RAISES CLASSIFICATIONS

GROUP 1: Brakeman; Muckers; Nippers; Topman and Bull Gang; Tunnel Track Laborer

GROUP 2: Burning and Cutting Torch; Concrete Laborers; Jackhammers; Laser Instrument Operators; Nozzleman, Pumpcrete or Shotcrete; Pipelayers.

GROUP 3: Miner; Retimberman

GROUP 3A: Powderman

Tunnel shaft and raise rates only apply to workers regularly employed inside a tunnel portal or shaft collar.

PLAS0867E 02/01/2003

	Rates	Fringes
NORTH OF THE 63RD PARALLEL:		
CEMENT MASONS	29.26	9.95
SOUTH OF THE 63RD PARALLEL		
CEMENT MASONS	29.01	9.95

TEAM0959A 09/01/2002

	Rates	Fringes
TRUCK DRIVERS:		

GROUP 1	31.40	9.57
GROUP 1A	32.45	9.57
GROUP 2	30.35	9.57
GROUP 3	29.67	9.57
GROUP 4	29.20	9.57
GROUP 5	28.56	9.57

GROUP 1: Semi with Double Box Mixer; Dump Trucks (including rockbuggy and trucks with pups) over 40 yards up to and including 60 yards; Deltas, Commanders, Rollogans and similar equipment when pulling sleds, trailers or similar equipment; Boat Coxswain; Lowboys including attached trailers and jeeps, up to and including 12 axles; Ready-mix over 12 yards up to and including 15 yards)

GROUP 1A: Dump Trucks (including Rockbuggy and Trucks with pups) over 60 yards up to and including 100 yards

GROUP 2: Turn-O-Wagon or DW-10 not self-loading; All Deltas, Commanders, Rollogans, and similar equipment; Mechanics; Tireman, heavy duty; Dump Trucks (including Rockbuggy and Trucks with pups) over 20 yards up to and including 40 yards; Lowboys including attached trailers and jeeps up to and including 8 axles; Super vac truck/cacasco truck/heat stress truck; Ready-mix over 7 yards up to and including 12 yards

GROUP 3: Dump Trucks (including Rockbuggy and Trucks with pups) over 10 yards up to and including 20 yards; batch trucks 8 yards and up; Oil distributor drivers; Greaser; Water Wagon (when pulled by Euclid or similar type equipment); Partsman

GROUP 4: Buggymobile; Semi or Truck and trailer; Dumpster; Tireman (light duty); Dump Trucks (including Rockbuggy and Truck with pups) up to and including 10 yards; Track Truck Equipment; Stringing Truck; Fuel Truck; Fuel Handler with truck; Grease Truck; Flat Beds, dual rear axle; Hyster Operators (handling bulk aggregate); Lumber Carrier; Water Wagon, semi; Water Wagon, dual axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame manufactured rating over 5 tons; Bull Lifts and Fork Lifts with Power Boom and Swing attachments, over 5 tons; Front End Loader with Forks; Bus Operator over 30 passengers; All Terrain Vehicles; Boom Truck/Knuckle Truck over 5 tons; Foam Distributor Truck/dual axle; Hydro-seeders, dual axle; Vacuum Trucks, Truck Vacuum Sweepers; Vacuum Trucks, Truck Vacuum Sweepers; Loadmaster (air and water); Air Cushion or similar type vehicle; Fire Truck; Combination Truck-fuel and grease; Compactor (when pulled by rubber tired equipment); Rigger (air/water/oilfield); Ready Mix, up to and including 7 yards

GROUP 5: Gravel Spreader Box Operator on Truck; Flat Beds, single rear axle; Boom Truck/Knuckle Truck up to and including 5 tons; Pickups (Pilot Cars and all light duty vehicles); Water Wagon, single axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame, manufactured rating 5 tons and under; Bull Lifts and Fork Lifts (fork lifts with power broom and swing attachments up to and including 5 tons); Buffer Truck; Tack Truck; Bus Operators (up to 30 passengers); Farm type Rubber Tired Tractor (when material handling or pulling wagons on a construction project); Foam Distributor, single axle; Hydro-Seeders, single axle; Team Drivers (horses, mules and similar equipment); Rigger (warehouse operation); Fuel Handler (station/bulk attendant); Batch Truck, up to and including 7 yards

WELDERS - Receive rate prescribed for craft performing operation
to which welding is incidental.
=====

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates
listed under that identifier do not reflect collectively
bargained wage and fringe benefit rates. Other designations
indicate unions whose rates have been determined to be
prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a
position on a wage determination matter
- * a conformance (additional classification and rate)
ruling

On survey related matters, initial contact, including requests
for summaries of surveys, should be with the Wage and Hour
Regional Office for the area in which the survey was conducted
because those Regional Offices have responsibility for the
Davis-Bacon survey program. If the response from this initial
contact is not satisfactory, then the process described in 2.)
and 3.) should be followed.

With regard to any other matter not yet ripe for the formal
process described here, initial contact should be with the Branch
of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an
interested party (those affected by the action) can request
review and reconsideration from the Wage and Hour Administrator
(See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the
interested party's position and by any information (wage payment
data, project description, area practice material, etc.) that the
requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an
interested party may appeal directly to the Administrative Review
Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

SECTION 00800
SPECIAL CONTRACT REQUIREMENTS

DACA85-03-R-0033
SECURITY FORCES COMPLEX
EIELSON AFB, AK

I-N-D-E-X

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CLAUSE

TITLE

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SCR-114 CERF IMPLEMENTATION

NOT USED 00800-13

ATTACHMENT: CLIMATOLOGICAL SUMMARY

--End of Special Contract Requirements Index--

SECTION 00800
SPECIAL CONTRACT REQUIREMENTS

SCR-1 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) (FAR 52.211-10):

The Contractor will be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the Notice to Proceed (NTP), (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 630 calendar days after receive NTP. The completion date is based on the assumption that the successful offeror will receive the Notice to Proceed not later than 15 FEB 2004. The completion date will be extended by the number of calendar days after the above date that the Contractor receives the Notice to Proceed, except to the extent that the delay in issuance of the Notice to Proceed results from the failure of the Contractor to execute the contract and give the required performance and payment bonds within the time specified in the offer. The time stated for completion shall include final cleanup of the premises.

SCR-2 THRU SCR-4 NOT USED

SCR-5 DRAWINGS AND SPECIFICATIONS (Aug 2000) (DFARS 252.236-7001):

(a) The Government will provide the Contractor, without charge, one set of drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall --

- (1) Check all the drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print drawings and specifications as needed.

(c) In general -

- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the mis-description of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or mis-described details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

reasonably available to the Contracting Officer. The Contracting Officer is not responsible for locating or obtaining any information not identified in the offer.

(d) Unless the offeror clearly indicates in its offer that the product being offered is an "equal" product, the offeror shall provide the brand name product referenced in the solicitation.

SCR-7 CERTIFICATES OF COMPLIANCE:

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in 3 copies. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, after tests are performed on selected samples, the material is found not to meet the specific requirements.

SCR-8 SUBMITTALS (ER 415-1-10, 30 May 1995):

Within 30 days after receipt of Notice to Proceed, the Contractor shall complete and submit to the Contracting Officer, in triplicate, submittal register ENG Form 4288 listing all submittals and dates. In addition to those items listed on ENG Form 4288, the Contractor shall furnish submittals for any deviation from the plans or specifications. The scheduled need dates must be recorded on the document for each item for control purposes. In preparing the document, adequate time (minimum of 30 days) shall be allowed for review and, only when stipulated, approval and possible resubmittal. Scheduling shall be coordinated with the approved progress schedule. The Contractor's Quality Control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective system. Copies of updated or corrected listing shall be submitted to the Contracting Officer at least every 60 days in the quantity specified. Payment will not be made for any material or equipment which does not comply with contract requirements.

Section 01330 includes an ENG Form 4288 listing technical items the Contractor shall submit to the Contracting Officer, as indicated in the contract requirements.

SCR-9 NOT USED

SCR-10 EIELSON AFB PHYSICAL DATA (APR 1984):

Data and information furnished or referred to below are furnished for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

a. The indications of physical conditions on the drawings and in the specifications are the result of site investigation.

b. Location: Eielson AFB is located on the Richardson Highway approximately 26 miles southeast of Fairbanks, Alaska.

c. Transportation:

(1) Water: Commercial docking facilities are available at Anchorage, Alaska.

(2) Highway: Eielson AFB is connected to the State of Alaska Highway System.

(3) Railroad: The Alaska Railroad offers freight service from the 48 contiguous states and Canada via rail barge and trainship through Whittier, and from Seward, to Anchorage and Fairbanks. In addition to the freight service, scheduled passenger service and express service between Anchorage and Fairbanks, and passenger service between Anchorage and Whittier are also available. Fairbanks (including Eielson AFB and Ft. Wainwright) is the northern terminus, and Seward and Whittier are the southern terminals of the Alaska Railroad.

d. Communications: Telephone communications and services are under the jurisdiction of the Communications Officer. The Contractor shall make all arrangements for required communication service directly with the Communications Office. The Government does not guarantee the adequacy or efficiency of the service or the number of telephones that can be assigned to the Contractor.

e. Weather Data: A Climatological Summary for Eielson AFB is attached to the end of this section.

SCR-11 ~~AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984) (FAR 52.236-14)~~:

(a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

SCR-12 IDENTIFICATION OF EMPLOYEES AND MILITARY REGULATIONS:

(a) The Contractor shall be responsible for compliance with all regulations and orders of the Commanding Officer of the Military Installation, respecting identification of employees, movements on installation, parking, truck entry, and all other military regulations which may affect the work.

(b) The work under this contract is to be performed at an operating Military Installation with consequent restrictions on entry and movement of non-military personnel and equipment.

SCR-13 INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997) (FAR 52.228-5):

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the following kinds and minimum amounts of insurance:

(1) Workman's Compensation and Employers' Liability Insurance: \$100,000.00.

(2) General Liability Insurance: A Bodily Injury, Comprehensive policy which provides \$500,000.00 per occurrence.

(3) Automobile Liability Insurance: A comprehensive policy which provides \$200,000.00 per person and \$500,000.00 per occurrence for bodily injury and \$20,000.00 per occurrence for property damage, covering the operation of its automobiles used in connection with the performance of the contract.

(4) Aircraft Public and Passenger Liability Insurance: Where aircraft are used in connection with the performance of the contract; \$200,000.00 per person, \$500,000.00 per occurrence for bodily injury, other than passenger liability, and \$200,000.00 per occurrence for property damage; \$200,000.00 per person for passenger liability bodily injury aggregate equal to the total number of seats or number of passengers, whichever is greater.

(5) Vessel Collision Liability and Protection and Indemnity Liability Insurance: Where vessels are used in connection with the performance of the contract.

(b) Before commencing the work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required above. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

SCR-14 SPECIAL SAFETY REQUIREMENTS:

The Safety and Health Requirements Manual referenced in paragraph Accident Prevention of the Contract Clauses is amended as indicated below. Copies of the manual can be ordered from the Superintendent of Documents, Government Printing Office, Washington DC, phone 202-512-1800, FAX 202-512-2250.

a. Paragraph 01.A: Add new paragraph 01.A.12 Safety Engineer.

(a) The Contractor shall employ at the project site, to cover all hours of work, at least one Safety and Occupational Health person to manage the Contractor's accident prevention program. Duties which are not germane to the safety program shall not be assigned to the Safety and Health person(s). The principal safety person shall report to and work directly for the Contractor's on-site top manager, higher level official, or corporate safety office. The Safety and Health person(s) shall have the authority to

take immediate steps to correct unsafe or unhealthful conditions. The presence of a Safety and Health person will not abrogate safety responsibilities of other personnel.

(b) Qualifications for Safety and Health person(s):

(1) Shall have a degree in engineering or safety in at least a four year program from an accredited school.

(2) Shall have a degree other than that specified in (1) above and, in addition, shall have been engaged in safety and occupational health for at least three (3) years, no time being credited to these three (3) years unless at least fifty (50) percent of the time each year was devoted to safety and occupational health; or

(3) In lieu of a degree, shall have been engaged in safety and occupational health for at least five (5) years, no time being credited to these five (5) years unless at least fifty (50) percent of the time each year was devoted to safety and occupational health;

(4) First aid work is not creditable experience.

(c) The name and qualifications of the nominated safety person(s) shall be furnished to the Contracting Officer for acceptability and a functional description of duties shall be provided prior to the pre-work conference.

b. Paragraph 05.A.01: Add new paragraph 05.A.01 d.

d. Employers shall make reasonable efforts to accommodate employees with religious beliefs that may conflict with PPE requirements. However, when reasonable efforts to accommodate the employee's religious beliefs do not provide the necessary safe working environment (without PPE), then the employer shall require the employee to use the appropriate PPE or the employee will not be allowed to work in the area where he/she will be exposed to a hazard requiring such protection.

c. Paragraph 16.C: Add new paragraphs 16.C.21 and 16.C.22.

16.C.21. During personnel handling operations, load and boom hoist drum brakes, swing brakes, and locking devices such as pawls or dogs shall be engaged when the occupied platform is in a stationary working position.

16.C.22. During personnel handling operations, the load hoist drum shall have a system or device on the power train other than the load hoist brake, which regulates the lowering rate of speed of the hoist mechanism (controlled load lowering). Free fall is prohibited.

d. Paragraph 21.A.15: Add new paragraph 21.A.15 d.

d. Standard guardrails shall be installed on all intermediate floors and roofs, including flat roof areas more than 6 feet above adjacent areas, during construction or rehabilitation of the buildings. The use of safety nets and safety belts with life lines may be substituted on pitched roofs.

SCR-15 NOT USED

SCR-16 ~~LAYOUT OF WORK (APR 1984) (PAR 52.236-17)~~:

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platfoms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due the Contractor.

SCR-17 ~~QUANTITY SURVEYS~~ (APR 1984) (~~FAR 52.236-16~~):

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(b) The Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government will make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

(c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

SCR-18 THRU SCR-20 NOT USED

SCR-21 ~~PERFORMANCE OF WORK BY THE CONTRACTOR~~ (APR 1984) (~~FAR 52.236-1~~):

The Contractor shall perform on the site, and with its own organization, work equivalent to at least twenty (20) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

SCR-22 SALVAGE MATERIALS AND EQUIPMENT (JAN 1965):

The Contractor shall maintain adequate property control records for all materials or equipment specified to be salvaged. These records may be in accordance with the Contractor's system of property control, if approved by the property administrator. The Contractor shall be responsible for the adequate storage and protection of all salvaged materials and equipment and shall replace, at no cost to the Government, all salvage materials and equipment which are broken or damaged during salvage operations as the result of its negligence, or while in its care.

SCR-23 THRU SCR-24 NOT USED

SCR-25 COMMUNICATION SECURITY:

All communications with DOD organizations are subject to COMSEC review. Contractor personnel shall be aware that telecommunications networks are continually subject to intercept by unfriendly intelligence organizations. The DOD has authorized the military departments to conduct COMSEC monitoring and recording of telephone calls originating from or terminating at DOD organizations. Therefore, civilian Contractor personnel are advised that any time they place a call to or receive a call from Alaska District offices or Resident Engineer offices located on military installations, they are subject to COMSEC procedures. The Contractor will assume the responsibility for ensuring wide and frequent dissemination of the above information to all employees dealing with official DOD information.

SCR-26 NOT USED**SCR-27 SUPERINTENDENCE OF SUBCONTRACTORS (JAN 1965):**

(a) The Contractor shall be required to furnish the following, in addition to the superintendence required by FAR Clause at 52.236-6, entitled "SUPERINTENDENCE BY CONTRACTOR":

(1) If more than 50 percent and less than 70 percent of the value of the contract work is subcontracted, one superintendent shall be provided at the site and on the Contractor's payroll to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

(2) If 70 percent or more of the value of the work is subcontracted, the Contractor will be required to furnish two such superintendents to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

(b) If the Contracting Officer, at any time after 50 percent of the subcontracted work has been completed, finds that satisfactory progress is being made, he may waive all or part of the above requirements for additional superintendence subject to the right of the Contracting Officer to reinstate such requirements if at any time during the progress of the remaining work he finds that satisfactory progress is not being made.

SCR-28 NOT USED**~~SCR-29 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (1999 JUNE HQ USAGE) (EFARS 52.231-5000):~~**

(a) This statement shall become operative only for negotiated contracts where cost or pricing data is requested, and for modifications to sealed bid or negotiated contracts where cost or pricing is requested. This clause does not apply to terminations. See 52.231-5001, Basis for settlement of proposals, and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a Contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region IX.

Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply. (Individual copies of the regional schedules are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Any schedule can be ordered by telephoning (202) 512-1800. The cost is \$33.00 each. Vol. 9 is stock no. 008-022-00292-8.)

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(iii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the Contracting Officer shall request the Contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

SCR-30 OPTION FOR INCREASED WORK

a. The Government may increase the work awarded by exercising Items 0003 through 0008 either independently or collectively at any time, or not at all, but no later than 60 calendar days after receipt of the original Notice to Proceed with work on the contract. Notice to Proceed on work added by exercise of the option will be given upon execution of consent of surety if consent of surety is required.

b. The parties hereto further agree that any options herein shall be considered exercised at the time the Government faxes the notification to the Contractor with a returned confirmation that the Contractor's fax machine received the notification.

c. Optional items awarded shall be completed within the time period for completion of the base items, as stated in SCR-1 or accepted in the Contractor's schedule.

SCR-31 THRU SCR-35 NOT USED

SCR-36 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (ER 415-1-15, 31 Oct 1989):

1. This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled "DEFAULT (FIXED PRICE CONSTRUCTION)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

a. The weather experienced at the project site during the contract period must be found to be unusually severe; that is, more severe than the adverse weather anticipated for the project location during any given month.

b. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

2. The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

Monthly Anticipated Adverse Weather Delay Work Days Based on a 5-Day Work Week

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
22	20	21	0	0	1	6	1	0	10	21	22

3. Upon acknowledgement of the Notice to Proceed and continuing throughout the contract, the Contractor shall record on the daily CQC report, the occurrence of adverse weather and the resultant impact to normally scheduled work. Actual adverse weather delays days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled workday. The number of actual adverse weather days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day in each month, and be recorded as full days. If the number of actual adverse weather days exceeds the number of days anticipated in Paragraph 2, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather workdays, and issue a modification in accordance with the Contract Clause entitled "DEFAULT (FIXED-PRICE CONSTRUCTION)".

SCR-37 NOT USED

SCR-38 YEAR 2000 COMPLIANCE (OCT 1997) (FAR 39.106):

In accordance with FAR 39.106, the Contractor shall ensure that with respect to any design, construction, goods, or services under this contract as well as any subsequent task/delivery orders issued under this contract (if applicable), all information technology contained therein shall be Year 2000 compliant. Specifically, the Contractor shall:

- (1) Perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task/delivery order which may be affected by the Year 2000 compliance requirement.
- (2) Indicate whether each component is currently Year 2000 compliant or requires an upgrade for compliance prior to Government acceptance.

SCR-39 NOT USED

SCR-40 KEY PERSONNEL:

During the performance of this contract, no substitutions shall be made for individuals specifically identified in the Contractor's accepted proposal to perform key functions in the work, unless determined necessary by the Contracting Officer and approved in writing. Proposed substitutes shall have qualifications comparable to those of the persons being replaced.

SCR-41 DESIGN-BUILD CONTRACT - ORDER OF PRECEDENCE

(a) The contract includes the standard contract clauses and schedules current at the time of the contract award. It entails (1) the solicitation in its entirety, including all drawings, cuts, illustrations, and any amendments, and (2) the successful offeror's accepted proposal. The contract constitutes and defines the entire agreement between the Contractor and the Government. No documentation shall be omitted which in any way bears upon the terms of that agreement.

(b) In the event of conflict or inconsistency between any of the provisions of this contract, precedence shall be given in the following order:

- 1) Betterments: Any portions of the accepted proposal which both conform to and exceed the provisions of the solicitation.
- 2) The provisions of the solicitation. (See also Contract Clause: SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION.)
- 3) All other provisions of the accepted proposal.
- 4) Any design products including, but not limited to, plans, specifications, engineering studies and analyses, shop drawings, equipment installation drawings, etc.. These are "deliverables" under the contract and are not part of the contract itself. Design products must conform with all provisions of the contract, in the order of precedence herein.

SCR-42 PROPOSED BETTERMENTS

(a) The minimum requirements of the contract are identified in the Request for Proposal. All betterments offered in the proposal become a requirement of the awarded contract.

(b) "Betterment" is defined as any component or system which exceeds the minimum requirements stated in the Request for Proposal. This includes all proposed betterments listed in accordance with the "Proposal Submission Requirements" of the Solicitation, and all Government identified betterments.

(c) "Government identified betterments" include the betterments identified on the "List of Accepted Project Betterments" prepared by the Proposal Evaluation Board and made part of the contract by alteration, and all other betterments identified in the accepted Proposal after award.

SCR-43 SEQUENCE OF DESIGN-CONSTRUCTION

(a) After receipt of Notice to Proceed (NTP), the Contractor shall initiate design, comply with all design submission requirements as covered under Division 01 General Requirements, and obtain Government review of each submission. The Contractor may initiate site clearing, etc. with the permission of the Contracting Officer and begin construction on portions of the work for which the Government has reviewed the Final Design submission and determined it satisfactory for purposes of beginning construction. The

Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Contracting Officer, the initial submission failed to meet the minimum quality requirements as set forth in the contract.

(b) If the Government allows the Contractor to proceed with limited construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

SCR-44 RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN

(a) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and any other non-construction services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services.

(b) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract, or of any cause of action arising out of the performance of this contract, and the Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of any of the services described in paragraph (a) furnished under this contract.

(c) The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law.

SCR-45 SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, U.S. ARMY CORPS OF ENGINEERS:

EM 385-1-1 and its changes are available at <http://www.hq.usace.army.mil> (at the HQ homepage, select Safety and Occupational Health).

The Contractor shall be responsible for complying with the current edition and all changes posted on the web (see web address above) as of the effective date of this solicitation and shall comply with the version in effect on the contract award date. This EM 385-1-1 shall remain in effect throughout the life of the contract.

SCR-46 THRU SCR-105 NOT USED

SCR-106 THRU SCR-111 NOT USED

~~SCR-112 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999) (FAR 52.222-23):~~

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

DELETE

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for Minority ParticipationGoals for Female Participation

8.7 (Anchorage, AK)

6.9 (Alaska)

15.1 (Locations outside city of Anchorage)

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on

(1) its implementation of the Equal Opportunity clause,

(2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and

(3) its efforts to meet the goals.

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the:

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract;

and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Alaska.

SCR-113 ENVIRONMENTAL LITIGATION:

(a) If the performance of all or part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the "Suspension of Work" clause of this contract. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

(b) The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

SCR-114 NOT USED

ATTACHMENT: CLIMATOLOGICAL SUMMARY

CLIMATOLOGICAL SUMMARY

EIELSON (Period of record exceeds 25 years)

MEANS AND EXTREMES FOR PERIOD OF RECORD

Temperature		Mean Annual	25.2° F
		Highest Recorded	93° F
		Lowest Recorded	-64° F
		Maximum Freezing Index	6724° Days (1955-56)
		Maximum Thawing Index	3848° Days 1951
Precipitation		Mean Annual	13.6"
		Mean Annual Snowfall	74.6"
		Maximum Monthly	7.47"
		Maximum Monthly Mean	2.51" July
		Maximum Rainfall During 24 hr Period	3.61" July 1967
		Maximum Snowfall During 24 hr Period	14.2" Feb 1966
		Maximum Monthly Snowfall	47.1" Dec 1949
		Greatest Depth Snow on Ground	54.0" Feb
Wind		Mean Hourly Speed	3.5 mph
		Prevailing Direction	W
		Maximum Velocity	74 mph
		Direction Maximum Velocity	SW
Annual Mean Number of Days	Sunrise to Sunset	Clear	83
		Partly Cloudy	71
		Cloudy	211
		Precipitation 0.01 inch or more	106
		Snow, Sleet, or Hail 1.0 inch or more	55
		Heavy Fog	12
		Thunderstorms	2 per year
	Max Temp	≧ 70°	43
		≧ 32°	154
	Min Temp	≧ 32°	229
		≧ Zero	124

NPA Form 3
AUG 1958

00800-15

--END OF SPECIAL CONTRACT REQUIREMENTS--

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**SECURITY FORCES COMPLEX
EIE183 – EIELSON AFB, ALASKA
DACA85-03-R-0033
FINAL REQUEST FOR PROPOSAL**

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SECTION 01010 DESIGN REQUIREMENTS**PART 1 SCOPE SUMMARY****1.1 PROJECT LOCATION**

- 1.1.1 Project Location – The proposed Consolidated Security Forces Complex (CSFC) is to be constructed at Eielson Air Force Base. Eielson AFB is located approximately 48.3 kilometers east of the city of Fairbanks, Alaska. Eielson AFB, Alaska is located at 65 degrees north latitude.
- A. Geology and Physiographic – Eielson AFB is located on the physiographic province termed the Tanana Lowlands, which is an arcuate band of alluvial sediments between the Alaska Range to the south, and the Yukon-Tanana Uplands to the north. The thickness of the alluvial sediment overlying bedrock at the project site is unknown. These areas are in a sub-arctic zone underlain by discontinuous permafrost. The subsurface materials are subject to liquefaction during seismic events.
- B. Seismology - The site lies within an active seismic area that has experienced several moderate to severe earthquakes in the past 60 years.
- C. Climate – The following summarizes design conditions; see Section 00800 for additional climate data:
1. Winter temperatures to -50° C.
 2. Summer temperatures to 25° C, and can reach to 34° C.
 3. Heating degree days – 7,933° C-Day.
 4. The mean wind speed is 5.6 km/h. The prevailing winter wind direction is west-northwest.
- 1.1.2 Project Sites – The project includes work on three non-contiguous sites. One new facility will be constructed and, as an option, three existing buildings will be demolished.
1. The proposed site for the new facility is located south of the existing baseball field and running track, bounded by Wabash Avenue to the west, Central Avenue to the east, and Division Street to the south. The site is covered with lawn, and primarily used as an athletic field. The site is relatively flat, and depressed about 1.5 meters below the adjacent streets.
 2. Building 2222 – 354th FW Security Forces Squadron Headquarters and Building 2224 – 354th FW Security Forces Squadron Vehicle Operations Building, located at the corner of Central Avenue and Street will be demolished (as an option).
 3. Building 3211 – 168th ARW Security Forces Squadron Headquarters, located near the corner of Division Street and Wabash Avenue will be demolished (as an option).
- 1.1.3 Existing Facilities – Buildings 2222, 2224 and 3211 will be demolished and the sites leveled as an option. No new structures are proposed for these sites.
- A. Building 2222 - The 354th Security Forces Squadron (Active Duty, AD) currently operates out of an 823 square meter building originally constructed as a Group Tactical Headquarters in 1959. It has reached a “forced-use” status due to severe deterioration causing overbearing maintenance issues and severe flooding which resulted in several inches of standing water in the armory in 2002.
- B. Building 2224 – The 354th Security Forces Squadron currently operates this 143 square meter building as a vehicle storage garage. It is located adjacent to Building 2222.
- C. Building 3211 - The 168th ARW Security Forces Squadron (Air National Guard, ANG) currently operates from a substandard facility, which is unsuitable for a sub-arctic environment. The

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facility is a 207 square meter trailer that was never intended for permanent use and does not promote an environment conducive to effective training and operational use. This facility does not provide mobility storage, which hampers the squadron's ability to deploy during national crises requiring the Air National Guard.

1.2 STATEMENT OF WORK SUMMARY

1.2.1 Refer to Part 2 – Minimum Design Criteria for Demolition, Hazards Abatement, Civil, Architectural, Structural, Mechanical, Electrical, and Fire Protection detailed technical requirements.

1.2.2 Refer to Part 3 – Room Criteria Sheets for detailed requirements and adjacencies for all building areas.

1.2.3 Project Goals Summary – Functional purpose of this project is to design and construct a Consolidated Security Forces Complex to house the 168th ARW Security Forces Squadron (ANG) and the 354th Security Forces Squadron (AD).

1.2.4 Demolition

- A. The Proposed New Construction Site has existing site features to be demolished including two abandoned buried POL pipelines. The buried POL pipelines run east to west across the site, adjacent to Division Street. They will be removed as part of sub grade preparation.
- B. Building 2222 – 354th FW Security Forces Squadron Headquarters. The building will be demolished and the site leveled (as an option). No new structures are proposed for this site.
- C. Building 2224 - 354th FW Security Forces Squadron Vehicle Operations Building. The building will be demolished and the site leveled (as an option). No new structures are proposed for this site.
- D. Building 3211 – 168th ARW Security Forces Squadron Headquarters. The building will be demolished and the site leveled (as an option). No new structures are proposed for this site.

1.2.5 Existing Buildings, Structures, & Systems to remain and/or reuse – The project includes work on three non-contiguous sites, as outlined in 1.1.2 Project Sites. At building demolition sites the existing building utilities will need to be terminated at demolition as required by each discipline. See 2.1 Demolition Design Criteria.

- A. An electric power line runs east to west across the proposed construction site, partly overhead and partly underground. It appears the new facilities can be constructed without its relocation, however the power line may be relocated if required to fit the final site design.

1.2.6 New Building Construction - The proposed new facility will combine security forces operations for the 168th Air National Guard and 354th Active Duty in one consolidated facility. The functional layout of the facility will provide autonomy for differing missions of the two organizations while taking advantage of combining common requirements such as utility systems, classrooms and weapons training simulators. See 1.2.9.A for Betterments.

1.2.7 New Systems and Site development – New construction and site improvements shall be arranged to minimize the total area of new gravel pad and provide vehicle circulation, parking, and access to support facilities defined in this Section.

- A. Traffic Systems

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1. Main entrances to parking areas will accommodate turning radii of 14.3-15.4 meters for a six pack truck, 9.1 meters for a 10K forklift, and 21.3-27.4 meters for a flatbed semi truck.
2. Parking will accommodate 150 spaces total – 132 POV and 18 GOV (12 Active Duty and 6 ANG). The GOV parking will be inside fenced areas.
3. The POV parking will also provide parking for the existing ball field if it is located on the north side of the new facility.

- B. Traffic Control – The Contractor shall conduct the work in a manner to minimize inconvenience to pedestrian and vehicular traffic and to adjacent facility users. The Contractor shall be responsible for planning and executing all temporary street closures, including detour routes, required to accomplish the work. No pedestrian routes, streets, or driveways shall be closed or partially closed without approval from the Contracting Officer and the base fire and security offices. In all cases, access for emergency vehicles to the site and adjacent facilities shall be maintained. The Contractor shall submit a written traffic control plan a minimum of 14 days prior to closing or partial closure of any streets or driveways.

When a street closure or partial closure is approved, the Contractor shall provide and maintain adequate detour routes. Detour routes using existing streets shall be left in a condition at least equal to their condition prior to use as a detour. Contractor shall provide, erect, and maintain barricades, fence, signs, lights, flagmen, and other devices necessary to insure traffic safety.

- C. Pedestrian Traffic – Pedestrian traffic will consist mainly of personnel transiting between the building and POV parking area. ADAAG and UFAS compliant sidewalk shall be provided in all locations.
- D. Utilidor tie-in – An existing 1800 mm x 1980 mm main concrete utilidor is located along the south side of Division Street. This project will construct a new utilidor off of the existing utilidor, which will cross under Division Street, to serve the new building. The new utilidor will supply sewer, fire and domestic water, steam and condensate service to the new building.
1. Water – A new water line will be extended to the building and new fire hydrant(s) in the new utilidor from the existing water service in the utilidor on the south side of Division Street. The new water line will provide domestic and fire water.
 2. Sanitary Waste Water – Sanitary waste will be pumped from the new building using a duplex lift station in the mechanical room. The sewer force main will be routed in the new utilidor section to the existing 250 mm sanitary sewer located in the main utilidor on the south side of Division Street. The existing sewer flows west by gravity to an existing lift station. The existing lift station has adequate capacity for the new building flows.
 3. Steam and Condensate – New steam and condensate lines will be extended in the new utilidor from the 300 mm steam line and 150 mm condensate line existing in the utilidor on the south side of Division Street.
 4. Planning for site development needs to include consideration for a possible future 464.5 SM expansion of the facility to accommodate the Office of Special Investigations.

1.2.8 Project Options – The Project Options include the following:

- A. Option 1 - Radiant floor heat in both Mobility Bays and Parking Garage.
- B. Option 2 - Pallet racks in both Mobility Bays (3 in AD Mobility Bay; 2 in ANG Mobility Bay). See Appendix 11 for catalog cuts.
- C. Option 3 - Demolition of three separate buildings, as outlined in 1.2.4 Demolition.
- D. Option 4 – CCTV equipment.

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- E. Option 5 – Ceiling fans.

1.2.9 Government-Proposed Betterments

Government-Proposed Betterments are listed in order of priority as determined by the Government, and are more fully defined in the respective discipline minimum design requirements in Part 2 Minimum Design Criteria and Part 3 Room Criteria Sheets in this Section.

Proposals shall include any or all of the following Betterments as the overall budget and gross building area allow.

- A. BETTERMENT 1 – Add 162 person fixed seating, sloped floor Lecture Hall with raised platform lectern, projection screen, projection booth, separate lobby, arctic entry, men's and women's toilets, mechanical room and communication room. Eliminate Classroom.
- B. BETTERMENT 2 – Add 74.3 square meter ANG Mobility Supply function. Reduce ANG Break Room by 18.6 square meters, from 65 to 46.4 square meters. Total building area increase of 55.7 square meters.

1.2.10 Construction Milestones

- A. The following dates constitute major milestones for the Project
1. NTP: 1 Feb 04
 2. Design after Award: 1 Feb – 30 Jul 04
 3. Fast Track – Civil/Structural Design: 1 Feb – 1 Apr 04
 4. Mobilize: 15 Apr 04
 5. Weather in: 15 Sep 04
 6. BOD: 1 Nov 05

1.2.11 Construction Constraints

- A. Climate, possible groundwater contamination, utilidor location and site location present challenges to the timely and successful completion of the Project.
1. Construction Season is calculated to be from mid-April to mid-September; work will occur over two seasons.
 2. Possible Groundwater Contamination – The proposed site is adjacent to areas in which soil and groundwater contamination has been documented, as outlined in 1.5.1.A. POL Contamination.
 3. Utilities for this Project site are approximately 75 meters away.
 4. Project site is constrained on three sides by main roads, and the existing surface is lower than the road surfaces by approximately 1.5 meters.
 5. Subsurface soils are subject to liquefaction during seismic events.
 6. Air quality permit to allow for electrical generator.

1.2.12 Government Commitments

- A. The Government has undertaken the following tasks to help mitigate the construction constraints:
1. Obtain topographic survey (Appendix 1) and geotechnical findings report, see Appendix 3.
 2. Initiating environmental permit applications for air quality, water, wastewater, storm water and hazardous waste (RCRA).
 - a) Air quality permit to allow for electrical generator.

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- b) Provide ADEC with letter indicating EAFB plans to connect a single facility to an existing water and wastewater distribution system.
- c) Site investigation may or may not locate contaminated soils. Demolition of existing facilities may potentially propagate the need for Hazardous Waste (RCRA) permit.

1.3 ANTITERRORISM / FORCE PROTECTION

1.3.1 Force Protection shall be designed and provided in accordance with UFC 4-010-0, DoD Minimum Antiterrorism Standards for Buildings. The following Antiterrorism/Force Protection requirements shall be reviewed with the user for security parameters.

- 1. A 25 meter ESZ setback shall be provided on all sides of the building.
- 2. Minimum area lighting of 0.5 foot-candles around the building perimeter. Lighting will reach 2.4 meters up the side of the buildings and will extend 3.0 meters from the building perimeter.
- 3. Landscaping to include minimal height planting and vehicle barriers.
 - a) No vegetation over 1.83 meters tall within 25 meters of the building.
 - b) Barriers may include fencing, retaining walls, ditches, or other suitable means. Boulders or Jersey barriers shall not be utilized. Bollards may be used at sidewalks and drives.
- 4. Fresh air intakes located to preclude introduction of hazardous agents.
- 5. Trash dumpsters will be located a minimum of 25 meters from the building.
- 6. Window and door openings protected by 6 mm laminated glass, steel reinforced aluminum frames, appropriate hardware to resist 0.07 kg/sq cm force applied to the glazing surface, and frame attachment to the exterior wall to resist 14.4 kg/sq cm tension force and 5.3 kg/sq cm shear force.
- 7. Provide bulletproof glazing at pass through window in Lobby to Control Center.
- 8. All walls enclosing Control Center shall be CMU, and all walls between Control Center and Lobby shall be solid grouted.

1.4 AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)

1.4.1 Accessibility Standards for this facility shall apply to all areas of the building as required by ADAAG and UFAS, with the exception of the locker/bench areas in the AD locker rooms.

- A. Accessibility shall include building signage, toilet room accessories, door hardware, and other elements described in ADAAG and UFAS requirements.

1.5 HAZARDOUS AND EXPLOSIVE MATERIALS

1.5.1 The following summarizes the types of Hazardous and Explosive materials:

- A. POL Contamination – The proposed site is adjacent to areas in which soil and groundwater contamination has been documented. Results from subsurface investigations are included in Appendix 17.

Site improvement recommendations will attempt to avoid contaminated soil and groundwater if it is encountered in subsurface explorations. See 1.2.11. Construction Constraints and 2.1.10.E. Hazardous Materials.

- B. Asbestos – Demolition of Buildings 2222 and 2224 is Option 3 in the project scope. A comprehensive Hazardous Materials Survey was performed to provide data on asbestos containing materials in the facilities. The Hazardous Materials Survey Reports can be found in Appendix 4. No asbestos containing material was detected in building 2224. Asbestos shall be abated within all applicable codes and regulations.

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Demolition of Building 3211 is Option 3 in the project scope. The facility was constructed in approximately 1992 from ATCO trailers. A truss/pitched roof was later added. A comprehensive Hazardous Materials Survey was performed to provide data on asbestos containing materials in the facility. The Hazardous Materials Survey Report can be found in Appendix 4 of the RFP. No asbestos containing materials were detected in the facility.

All steam, condensate return, water, sewage and communications utilities are accessible within the base utilidor system. Asbestos has been abated in the main utilidor and lateral supply lines for all three buildings. However, Eielson Air Force Base policy is to consider these utilidors to be contaminated with asbestos dusts due to the proximity to utilidors with asbestos containing materials and the ability of asbestos fibers to migrate with minimal air movement.

- C. Lead Based Paints – A LBP survey was conducted for Buildings 2222, 2224 and 3211. Additionally, a Toxicity Characteristics Leaching Procedure (TCLP) test was performed on each building to determine if the proposed demolition waste streams are hazardous or non-hazardous with respect to lead. The Hazardous Materials Survey Reports can be found in Appendix 4. All LBP shall be removed as necessary within all applicable codes and regulations. The only LBP detected was on window frames and handrails in building 2222.
- D. Other Hazardous Materials - The Hazardous Materials Survey identified PCB containing materials in electrical equipment and mercury containing materials in electrical equipment in all three buildings. These materials shall be removed and disposed of prior to demolition in accordance with applicable codes and regulations.

1.6 PROHIBITED ITEMS

- 1.6.1 Proposals shall not present a design inclusive of any prohibited item described by each discipline in Part 2 Minimum Design Criteria.

1.7 CONTRACTOR-PROPOSED INNOVATIONS

- 1.7.1 The design criteria stated in this RFP are the minimum quality acceptable. Innovation and creativity are encouraged in developing the optimum overall function for this project and delivering best value to the Government. This section describes the minimum requirements for the design. Offerors are encouraged to propose betterments that meet and/or exceed these minimum requirements within allowable funds.
- 1.7.2 Proposals shall itemize Contractor-proposed Innovations and describe the reasons and cost factors for their inclusion. Refer to Section 00100 for Proposal Submission Requirements and Section 00120 for Evaluation Factors for Award. With the exception of Prohibited Items, all Innovations that benefit the facility will be considered, and will be evaluated based on durability, function, conformance to base standards, maintenance, and aesthetics. Innovations must meet technical and functional criteria outlined within this section, and must be acceptable to the 354th CES.
- 1.7.3 Civil, architectural, structural, mechanical, electrical, and fire protection minimum design requirements described in Parts 2.3, 2.4, 2.5, 2.6, 2.7, and 2.8 are prescriptive only where indicated, innovations are allowed within the performance parameters.

1.8 GOVERNMENT-FURNISHED VS. CONTRACTOR-FURNISHED ITEMS

- 1.8.1 The following abbreviations are used in this document and in the Part 3 Room Criteria Sheets.
 - A. Government-Furnished Government-Installed (GFGI)

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- B. Contractor-Furnished Contractor-Installed (CFCI)
 - C. Government-Furnished Contractor-Installed (GFCI)
- 1.9 SUPPORTING REQUIREMENTS
- 1.9.1 Intent
- A. The Government seeks a complete and usable Consolidated Security Forces Complex, free of defects and compatible with the surrounding built and natural environment.
 - B. This Project shall be designed and constructed with quality materials and workmanship throughout and in accordance with all applicable codes and standards and the requirements of this RFP. It is the intent of this RFP to establish minimum design and construction requirements for the proposed buildings that meet or exceed the standards referenced in this Section. Choice of materials and methods of construction shall not compromise the safety of building occupants and shall optimize quality, function, aesthetics, economy, maintainability, and life cycle cost.
 - 1. Particular attention to durable, low or no-maintenance materials, systems, equipment, and construction is stressed.
 - 2. Fire protection systems and facility design are the primary means of preserving the life safety of personnel.
 - 3. Natural light, natural ventilation and architectural enhancement of public areas such as Lobby, Conference Rooms, etc. should be developed by the D/B Proposer to enhance the building image within Base design guidelines.
 - C. Products specified in Section 01010 are non-proprietary unless noted otherwise. Products specifying one manufacturer's salient features, including: performance standards, sizes/capacity, warranty, etc., may be substituted with a product of equal or better quality than the one specified.
 - D. Sustainable Project Rating Tool (SPiRiT) – The D/B team shall use the SPiRiT Checklist to determine the project's anticipated performance relative to energy and environmental objectives. The D/B team must attain a Sustainable Project Level rating of at least 35 points (SPiRiT Silver). See Appendix 15.
- 1.10 DESIGNER OF RECORD
- 1.10.1 Final design submittals and each drawing included therein shall be signed by and affixed with the seal of an architect or engineer registered in the State of Alaska who shall be termed the "Designer of Record" for the respective disciplines.
- A. See 2.8 Fire Protection Design Criteria for requirements for fire protection system designer of record.
- 1.10.2 Where construction and testing standards and criteria are contained within section 01010, the Designer of Record shall place them in the construction documents and require them of the Contractor during construction.
- 1.11 SUPPORTING INFORMATION
- 1.11.1 Site Diagram / Building Layout
- A. No site layout or building space plan is included in this RFP; the D/B contractor is given information on site constraints and building spatial relationships needed to develop the most

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effective Project design the budget allows. The D/B contractor shall prepare a furniture and equipment plan showing all pieces with basic modular systems furniture layout based on Unico standards to determine if room areas are appropriate. See Room Criteria Sheets in Part 3 of Section 01010 for spatial relationships and detailed information by area.

1.11.2 Appendices

- A. The drawings and documents listed below delineate project-specific design criteria in support of the codes and references above.

1. Drawings:
 - G1.0 Location/Vicinity Map;
 - C1.0 Large Site Plan;
 - 15-04-600 Site Survey;
 - HA1.1 Hazardous Materials Removal – Bldg 2222 - First Floor;
 - HA1.2 Hazardous Materials Removal – Bldg 2222 - Basement;
 - HA1.3 Hazardous Materials Removal – Bldg 2222 – Second Floor;
 - HA1.4 Hazardous Materials Removal – Bldg 2224;
 - HA1.5 Hazardous Materials Removal – Bldg 3211
2. Site Photographs
3. Geotechnical Findings Report
4. Hazardous Materials Survey Report
5. Not Used
6. Example Outline - Environmental Protection/Borrow Pit Plan;
Eielson AFB Waste Disposal/Borrow Pit Coordination Review (Basic Bid);
Eielson AFB Waste Disposal/Borrow Pit Coordination Review (Option 1)
7. Not Used
8. Not Used
9. Communications Requirements
10. Eielson AFB Architectural Compatibility Plan
11. Project Equipment and Information: Access Floor System; Car Wash System; Coiling Counter Door; CATS Room Layout; Commercial Vacuum; AD Control Center Equipment; 354 SFS Munitions Information; Pallet Racks/Mezzanine; Partswasher & Weapons Cleaning System; Plasma Display System; Weapons Issue Window; Weapons Storage Rack
12. Oil/Water Separators Operations, Maintenance and Construction
13. Heating/Ventilation/Air Conditioning/Refrigeration, Eielson AFB Standards
14. Utilidor Eielson AFB Standards; Eielson Utilidor Design Guide
15. SPiRiT Checklist
16. Not Used
17. Chemical Data Report
18. Mechanical, Other Than HVACR & Utilidors, Eielson AFB Standards

1.11.3 Codes and References

- A. Industry standard references such as the IBC, NFPA, and ASHRAE and some references readily available and/or on the Internet are not attached with this RFP. Each offeror shall be responsible for obtaining any documents not attached as part of this RFP but referenced as criteria for this project. Requirements contained in this RFP may revise, add to, or substitute for criteria contained in the referenced documents. This RFP shall be deemed the controlling authority wherever such differences exist.
1. See Section 01090 Sources for Reference Publications to obtain publications.
- B. The publications listed below form the regulatory standards of this specification. Construction shall be in accordance with the following codes, standards, and regulations. If dates are not given for reference standards or criteria, the latest edition at the time this document is released

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shall be used. The most stringent shall govern where discrepancies occur. The A-E shall follow the instruction and guidance included on the CD provided by the Government entitled "Engineering Instructions", which is also known and referred to as "Section J". See the subsequent discipline narratives in this Section for additional regulatory standards, codes, and references.

1. American Society of Civil Engineers (ASCE)
2. American Society of Testing Material (ASTM)
3. American Water Works Association (AWWA)
4. National Fire Protection Association (NFPA)
5. AFH 32-1084 Air Force Facility Requirements
6. ANGH 32-1002 Air National Guard Facility Requirements
7. Unified Facilities Criteria 01-200-1 General Building Requirements
8. Unified Facilities Criteria 3-120-01 Air Force Sign Standard
9. Unified Facilities Criteria 3-600-01 Fire Protection Engineering for Facilities
10. Unified Facilities Criteria 4-010-01 DoD Mass Notification System; DoD Minimum Antiterrorism Standards for Buildings
11. TM 5-803-14 Site Planning and Design
12. TM 5-813-5 Water Supply, Water Distribution
13. TM 5-813-6 Water Supply, Water Supply for Fire Protection
14. TM 5-822-2 General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas
15. TM 5-822-5 Pavement Design for Roads, Streets, Walks, and Open Storage Areas
16. TM 5-822-7 Standard Practice for Concrete Pavements
17. International Building Code (IBC), 2000 Edition
18. International Fire Code (IFC)
19. Installation Design Guide, Eielson AFB
20. Design and Value Engineering Charette Report
21. Uniform Federal Guide Specifications (UFGS)
22. E1-01D010 Engineering Instructions, Construction Cost Estimates
23. T1-802-01 Technical Instructions, Code 3 Design * Parametric Estimating
24. Technical Requirements for Design-Build Military Construction
25. ETL 1110-3-491 Sustainability
26. ETL 02-12, Table 1 (per direction from the Active Duty Security Forces and the Air National Guard Security Forces)

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.1 DEMOLITION DESIGN CRITERIA****2.1.1 References**

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. If dates are not given for reference standards or criteria, the latest edition is to be used.
- B. Construction shall be in accordance with the following codes, standards, and regulations. The most stringent shall govern when discrepancies occur.
 - 1. EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual
 - 2. Hazardous Material and Waste Management Plan (HMWMP) for Eielson AFB
 - 3. Contractor Guidance for Preparing and Executing Stormwater Pollution Prevention Plans, ADOT&PF 2nd Edition 1993
 - 4. Hazardous Materials Survey Report (see Appendix 4)
 - 5. Geotechnical Findings Report (see Appendix 3)
 - 6. Chemical Data Report (see Appendix 17)
 - 7. Waste Disposal/Borrow Pit Coordination Review (see Appendix 6)
- C. Refer to 2.2 Hazards Abatement Design Criteria, for specific codes, standards, and regulations applicable to hazardous material removal work.

2.1.2 Designer Responsibility

- A. The Design-Build contractor's Architect or Engineer(s) of Record shall be responsible for the design associated with demolition work. Complete design shall generally include that required to define and describe execution of the demolition work including hazardous material abatement, removal, handling, and disposal; shoring and safety measures; and interface with existing utilities and surface features that remain. The demolition design drawings shall be sealed and signed by the architect or engineer(s) in responsible charge. The architect or engineer(s) shall be licensed in the State of Alaska.

2.1.3 Scope and Objectives

- A. Demolition work shall consist of the complete design and construction of removal of existing buildings, site improvements, and utilities as indicated. It shall be the Contractor's responsibility to protect existing features including roads, utilidors, turf, landscaping, trees, sidewalks, paving, curbs, and similar items not in the contract work limits, which if damaged by the Contractor shall be replaced in kind at no cost to the Government.

2.1.4 Demolition Work

- A. Demolition procedures, methods, sequence of operations, and equipment shall be in accordance with EM 385-1-1.
- B. The Air Force and ANG will dispose of or relocate all operations equipment from their buildings prior to turning them over to the Contractor for demolition.
- C. Coordinate all utility demolition with Eielson AFB utility shops (electrical, communication, POL, and utilidor).
 - 1. Existing utility services shall be protected from damage. Coordinate and obtain locates for all utilities prior to beginning work.

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2. Contractor shall cap off all existing utility connections at manholes or where the service line connects to the main. Dead end service lines shall not be allowed. Closure of utilities shall be with welded cap or blind flanged.
 3. Electrical shop will disconnect power and remove service transformers. Contractor shall remove service pole and feeder to building.
 4. Communication shop will disconnect telephone, alarms, TV, and remove any equipment to be retained by the Base.
 5. POL shop will confirm disconnection locations and capping method for petroleum pipelines.
 6. Utilidor shop will confirm disconnection locations and capping methods for piped utilities.
- D. Rubbish and debris shall be removed from Government property daily, unless otherwise directed, to avoid accumulation at the demolition site. The Contractor shall take necessary precautions to avoid damaging Government property, and if damage occurs, shall repair or replace the damage as directed by the Contracting Officer at no cost to the government. When utility lines are encountered that are not indicated on the drawings, the Contracting Officer shall be notified prior to further work in that area.
- E. Demolition of all features or items found on the site (roads, fence, utilities, poles, etc.) shall be considered incidental to the contract. Title to material and equipment to be demolished, except historical items, is vested in the Contractor upon receipt of notice to proceed and the Government shall not be responsible for the condition, loss, or damage to such property. There are no known items of historical significance included in this project.
- F. Disposal of Solid Wastes: Dispose of non-hazardous waste in accordance with the final Waste Disposal/Borrow Pit Plan. The Contractor shall be responsible for disposal of all demolition debris, construction debris, and all solid waste at an approved off-base location. Solid waste shall be placed in containers and disposed on a regular schedule. All handling, transport, and disposal shall be conducted in such a way as to prevent spillage and contamination in compliance with Federal, State, and Local requirements. Clean granular soil materials shall be disposed of at an approved off base location or on-base in accordance with the Waste Disposal/Borrow Pit Plan. Disposal of any hazardous waste shall be made through the Eielson Hazardous Waste Facility in accordance with 2.2 Hazards Abatement Design Criteria.
- G. All asphalt paving and P.C.C. sidewalk shall be sawcut at the limits of removal. As applicable, replacement or repair asphalt paving, P.C.C. sidewalk, base material, and subbase material shall match existing thickness.
- H. The Contractor shall conduct demolition and removal operations to ensure minimum interference with streets, walks, or other adjacent facilities being used.
- I. The Contractor shall ensure safe passage of persons around area of demolition and conduct operations to prevent injury to adjacent buildings, structures, and persons. The Contractor shall promptly repair damages caused to adjacent structures by demolition operations at no cost to the Government.
- J. Regulatory Requirements: Contractor shall be required to obtain and submit a Waste Disposal/Borrow Pit Coordination Review worksheet (see Appendix 6). In addition, a Waste Disposal/Borrow Pit Plan (see Appendix 6) shall be provided to the Contractor within 30 days of submitting the Coordination Review worksheet. Contractor shall review and comply with Eielson Waste Disposal/Borrow Pit Plan with regard to hauling and disposal regulations, in exchange for use of Base disposal and borrow facilities, and before starting any demolition work.

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- K. Use water mist, temporary enclosures and other suitable methodology to limit the spread of dust and debris. Use Best Management Practices (BMP's) as necessary to mitigate stormwater erosion and sediment pollution runoff from the site. Comply with governing state and federal environmental protection regulations.
- 2.1.5 Environmental Issues
- A. This project includes demolishing, handling and disposal of hazardous materials. See 2.2 Hazards Abatement Design Criteria for specific requirements for hazardous materials.
 - B. The Contractor is responsible for preparing the necessary documentation, including work plans, sampling and testing reports, and other documents required to accomplish the work. In addition the Contractor shall comply with existing permit and work plan requirements in place between Eielson AFB and regulatory agencies. The Contractor shall communicate environmental issues through the Contracting Officer and 354 CES/CEVR. Direct communication with regulatory agencies is prohibited unless approved in advance by the Contracting Officer. The Contractor shall pay for regulatory review fees necessary for obtaining permits.
 - C. If any garbage, debris, drums, free liquids, or other potentially hazardous materials not addressed in the Hazardous Materials Report are encountered during construction, notify the Contracting Officer and 354 CES/CEVR (907) 377-1164 before proceeding with removal.
 - D. The cliff swallow, which is known to build nests under eaves, vents and entranceways, is Federally protected. If a project site is found or known to be used by nesting cliff swallows, the Contractor shall implement a program to wash/knock down the nests prior to nest completion. Program must begin by May 10 and continue through July 30 or until the construction project has removed all potential nesting sites. Failure to do so could result in work stoppages. Building design should incorporate features to discourage cliff swallow use.
- 2.1.6 Work Description
- A. This project includes demolition work at the new CSFC Site and, as an option, at existing Building 2222, existing Building 2224, and existing Building 3211.
- 2.1.7 New CSFC Site
- A. Site Description
 1. The CSFC site is a sports field with a grass surface. No buildings are present at the site.
 2. The site has two abandoned underground POL pipelines through the site, two groundwater monitoring wells, two peizometer wells, and overhead and underground electrical distribution.
 3. Demolition shall include removal of turf, asphalt, the two abandoned POL pipelines, and the peizometers within the area of the new site developments.
 4. Connection to existing utilities shall require excavating across existing asphalt paved roadway(s), requiring demolition of existing paving.
 5. Connection to the existing utilidor shall include a new manhole, requiring demolition of existing concrete manhole and existing piping for the tie-ins.
 6. The overhead and underground electrical line across the site may need to be relocated, depending on the design / build contractor's final site design. Relocation shall be considered incidental to the work.
 - B. Items to Remain
 1. It is preferred the groundwater monitoring wells remain. Coordinate work around existing monitoring wells with the Contracting Officer and 354 CES/CEVR (907) 377-1164.

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- C. Patching
 - 1. POL lines shall be plugged with weld on caps.
 - 2. Asphalt paving for utilidor cuts across roads shall be patched. Existing pavement shall be sawcut to provide a straight patch line perpendicular to the traffic lanes. New paving and subbase shall match existing.
 - D. Subsurface Conditions
 - 1. Refer to Geotechnical Findings Report, Geophysical Site Investigation and Chemical Data Report (Appendices 3 and 17).
 - E. Hazardous Materials
 - 1. Refer to 2.2 Hazards Abatement Design Criteria for specific requirements for hazardous material removal at utilidor.
 - 2. Contaminated groundwater and soil may underlie a portion of the new CSFC site. Work shall be accomplished in a manner that does not require dewatering of groundwater. Surface runoff that enters excavations may become contaminated if soils are contaminated. Dewatering of surface runoff from excavation shall include sampling and testing and treatment as required. Any dewatering required during construction shall be coordinated with the Contracting Officer and 354 CES/CEVR (907) 377-1164 because of potential impact on plume migration. See 2.3 Civil Design Criteria for specific requirements for contaminated soil and stormwater runoff.
- 2.1.8 Building 2222 – 354th FW Security Forces Squadron Headquarters
- A. Building Description
 - 1. Building 2222 is a two story above grade with full basement that functions as a police station. The building footprint is approximately 12 meters by 25 meters.
 - 2. Construction type is concrete frame with interior and exterior concrete and CMU shear walls. Floors are concrete slabs. Finishes include metal roof, wallboard interior partitions and ceilings, suspended ceilings, windows, floor coverings. The building includes mechanical and electrical systems typical of office space, including fluorescent lights.
 - 3. A single story building housing an emergency generator is connected to Building 2222. The building footprint is 3 meters by 4 meters. A 10,000 liter skid mounted horizontal steel fuel storage tank is located outside the generator building on a concrete slab, surrounded by chainlink fence.
 - 4. Demolition includes removal of hazardous materials, all structure (superstructure and foundations, including basement walls and slab), and partitions, mechanical, and electrical systems.
 - 5. The hole resulting from demolition shall be filled with unclassified fill compacted to 90% relative density to result in a level site, allowing for topsoil cover.
 - B. Site Description
 - 1. The site includes sidewalks and landscaping to the north and east sides of the building, asphalt parking to the west side, and grass to the south. A 10 meter steel antenna on a concrete pad footing is located on the south side for the building.
 - 2. Water, sanitary sewer, steam and condensate utilities are provided through an underground concrete utilidor. Electrical service is an overhead service drop.
 - 3. Demolition shall include removal of the building signs, concrete access sidewalks, concrete steps at porches, antenna and concrete foundation, generator fuel tank concrete slab and foundation, timber landscaping. Utilidors, including concrete structure and piping, shall be removed to the service manhole. Electrical service shall be disconnected and the service conductors and pole removed.
 - 4. Asphalt pavement shall be removed to the extent required to demolish the building and utilities.

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- C. Items to Remain
 1. The wood deck picnic facilities located south of the building.
 2. Generator and fuel tank will be removed by the Government.
 - D. Patching
 1. Edges of AC pavement disturbed by the demolition shall be sawcut in a straight line parallel with adjacent streets and curbs. Concrete sidewalks and curbs shall be sawcut at the interface of walks to remain.
 2. The utilidor piping shall be capped using a welded cap or blind flange at the manhole. The manhole wall shall be infilled with a concrete patch.
 3. The disturbed and filled areas shall be topsoiled and seeded.
 - E. Subsurface Conditions
 1. There has not been any project specific subsurface exploration at the site.
 2. Borings for other projects indicate the top 1 meter generally consists of poorly graded sand and silt. Below the top layer the soils generally consist of well-graded gravel with sand and silt. The groundwater is approximately 2 meters below existing grade.
 3. Field screening shall be used to determine if soils are contaminated during all excavation work.
 - F. Hazardous Materials
 1. Refer to 2.2 Hazards Abatement Design Criteria for specific requirements for hazardous material removal.
- 2.1.9 Building 2224 – 354th FW Security Forces Squadron Vehicle Operations Building
- A. Building Description
 1. Building 2224 is a single story vehicle storage garage. The building footprint is approximately 8 meters by 20 meters.
 2. Construction type is CMU exterior walls with a concrete slab and concrete foundation. Finishes include metal roof, overhead doors, interior GWB furring and partitions, and suspended ceilings. The building includes mechanical and electrical systems typical of vehicle garage space.
 3. Demolition includes removal of hazardous materials, all structure (superstructure and foundations), partitions, mechanical, and electrical systems.
 - B. Site Description
 1. Asphalt pavement surrounds the building.
 2. Water, sanitary sewer, steam and condensate utilities are provided through an underground concrete utilidor. Electrical service is underground.
 3. Demolition includes removal of the building sign and utilities. The utilidor, including concrete structures and piping, shall be removed to the service manhole. Electrical service shall be disconnected and the wire and conduit removed between the building and the power pole on the west side of the building.
 4. Asphalt pavement shall be removed to the extent required to demolish the building and utilities.
 - C. Items to Remain
 1. None identified.
 - D. Patching
 1. The utilidor piping shall be capped using a welded cap or blind flange at the manhole. The manhole wall shall be infilled with a concrete patch.

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2. Edges of AC pavement disturbed by the demolition shall be sawcut in a straight line parallel with adjacent streets and curbs. Concrete sidewalks and curbs shall sawcut at the interface of walks to remain.
3. The disturbed and filled areas shall be backfilled with classified material compacted to 95% relative density and gravel surfaced for use as a parking area.

E. Subsurface Conditions

1. There has not been any project specific subsurface exploration at the site.
2. Borings for other projects indicate the top 1 meter generally consists of poorly graded sand and silt. Below the top layer the soils generally consist of well-graded gravel with sand and silt. The groundwater is approximately 2 meters below existing grade.
3. Field screening shall be used to determine if soils are contaminated during all excavation work.

F. Hazardous Materials

1. Refer to 2.2 Hazards Abatement Design Criteria for specific requirements for hazardous material removal.

2.1.10 Building 3211 – 168th ARW Security Forces**A. Building Description**

1. Building 3211 is a single story police station. The building footprint is approximately 7 meters by 30 meters, with a 3 meter by 3 meter arctic entry porch on the north side.
2. The building is elevated above grade approximately 1 meter. It is an Atco type portable building that has been permanently placed and adapted for use. Construction type is light gauge metal framing and wood framing. Finishes include metal roof, wallboard interior partitions and ceilings, suspended ceilings, windows, floor coverings. The building includes mechanical and electrical systems typical of office space, including florescent lights.
3. Demolition includes removal of hazardous materials, all structure (superstructure and foundations), partitions, mechanical, and electrical systems.

B. Site Description

1. The site includes sidewalks and landscaping to the north and west sides of the building, gravel parking to the east and south sides.
2. Two wood frame loading docks are located adjacent to the south side of the building, one approximately 4 meters by 7 meters and one approximately 4 meters by 5 meters.
3. A 4 meter by 15 meter concrete slab covered by a wood frame shed roof is located adjacent to the south side of the building. A 7 meter long conex type storage container is located on the slab.
4. Water, sanitary sewer, steam and condensate utilities are provided through an underground concrete utilidor. Electrical service is overhead.
5. Demolition includes removal of the building sign, loading docks, covered storage, and utilities. The utilidor, including concrete structures and piping, shall be removed to the service manhole. Electrical service shall be disconnected and the wire removed between the building and the power pole on the north side of the building.

C. Items to Remain

1. Conex container will be relocated by ANG.

D. Patching

1. The utilidor piping shall be capped using a welded cap or blind flange at the manhole. The manhole wall shall be infilled with a concrete patch.
2. The building footprint shall be filled with classified material compacted to 95% and gravel surfaced for parking.

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- E. Subsurface Conditions
 - 1. There has not been any project specific subsurface exploration at the site.
 - 2. Borings for other projects indicate the top 1 meter generally consists of poorly graded sand and silt. Below the top layer the soils generally consist of well-graded gravel with sand and silt. The groundwater is approximately 2 meters below existing grade.
 - 3. Field screening shall be used to determine if soils are contaminated during all excavation work.
 - F. Hazardous Materials
 - 1. Refer to 2.2 Hazards Abatement Design Criteria for specific requirements for hazardous material removal.
- 2.1.11 Sequencing
- A. The new CSFC replaces existing buildings 2222, 2224, and 3211, which are all currently in use. Demolition of existing buildings cannot start until the CSFC is complete and the occupants of the existing buildings have moved to the new CSFC.
 - B. Allow 90 days after new construction is completed before starting demolition for users to move from the existing buildings to the new CSFC.
- 2.1.12 Prohibited Items
- A. On site burning of debris.
 - B. On-site burial of construction materials.
 - C. Use of blasting.

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.2 HAZARDS ABATEMENT DESIGN CRITERIA****2.2.1 Summary**

- A. This section includes the minimum requirements for the proper removal and disposal of hazardous materials from buildings 2222, 2224, and 3211 slated for demolition under this project.
- B. A hazardous materials survey has been performed on Buildings 2222, 2224 and 3211 for this project and the Hazardous Materials Survey Report is attached as Appendix 4 to the RFP documents. Estimated quantities of hazardous materials are identified in the Hazardous Materials Survey Report.
- C. Eielson AFB considers utilidors to be Permit Required Confined Spaces. Contractor shall have a confined space program for entry and performing work in utilidors that complies with the Corps of Engineers (COE) Safety and Health Requirements Manual and 29 CFR 1910.146. Confined space permits shall be issued prior to any utilidor work.

2.2.2 Scope of Work – The Contractor shall identify all hazardous materials in the project to be removed, create a work plan for the safe removal of these materials, remove the materials and transport and dispose of them in accordance with all applicable federal, state and local regulations, the specifications and the approved work plan. Coordinate all project abatement activity with the work of other trades at the job site to ensure that unprotected workers are not exposed to hazardous materials. Provide documentation that hazardous materials have been removed, properly disposed of and the work area is safe for unprotected workers.

2.2.3 Asbestos Abatement – Asbestos abatement work shall be performed in accordance with referenced standards and regulations, the specifications, and the approved Contractor's Hazardous Materials Work Plan. A survey of the buildings and utilidor has been performed and results indicate that asbestos-containing material exists in the buildings and utilidors.

2.2.4 Lead Abatement – Lead abatement work shall be performed in accordance with referenced standards and regulations, the specifications, and the approved Contractor's Hazardous Materials Work Plan. Regulated work areas shall be established for all lead abatement work. Lead-containing paint was detected on items to be removed as part of the project scope of work. Lead contaminated soils identified by the survey report shall be removed and properly disposed of. Metal items shall be recycled to the extent practical. All loose and flaking paint chips shall be collected and disposed of as hazardous waste.

2.2.5 Chemical Hazards Abatement – Chemical hazards abatement work shall be performed in accordance with referenced standards and regulations, the specifications, and the approved Contractor's Hazardous Materials Work Plan. Regulated work areas shall be established for all chemical hazards abatement work.

2.2.6 References – Hazardous materials abatement shall be performed in accordance with the following applicable codes, standards and regulations.

ANSI Z9.2 (1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems.

ANSI Z87.1 (1989; Errata; Z87.1a) Occupational and Educational Eye and Face Protection.

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ANSI Z88.2	(1992) Respiratory Protection
ASTM D 1331	(1989; R 1995) Surface and Interfacial Tension of Solutions of Surface-Active Agents
ASTM D 4397	(1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
ASTM E 119	(2000) Fire Tests of Building Construction and Materials
ASTM E 1368	(2000) Visual Inspection of Asbestos Abatement Projects
ASTM E 1553	(1993) Practice for Collection of Airborne Particulate Lead During Abatement and Construction Activities
ASTM E 1613	(1999) Standard Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace, Atomic Absorption Spectrometry (GFAAS) Techniques
ASTM E 1644	(1998) Practice for Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead
ASTM E 1726	(1995) Sample Digestion of Soils for the Determination of Lead by Atomic Spectrometry
ASTM E 1727	(1999) Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques
ASTM E 1728	(1999) Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques
ASTM E 1729	(1999) Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques
ASTM E 1741	(2000) Preparation of Airborne Particulate Lead Samples Collected during Abatement and Construction Activities for Subsequent Analysis by Atomic Spectrometry
ASTM E 1792	(1996a) Wipe Sampling Materials for Lead in Surface Dust
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 61	National Emissions Standards for Hazardous Air Pollutants
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 268	Land Disposal Restrictions
40 CFR 763	Asbestos
42 CFR 84	Approval of Respiratory Protective Devices
49 CFR 107	Hazardous Materials Program Procedures
49 CFR 171	General Information, Regulations and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packaging
AR 200-1	Hazardous Materials and Regulated Waste Management USA Army, Alaska, Pamphlet 200-1 Hazardous Materials and Regulated Waste Management
CGA G-7	Compressed Air for Human Respiration
CGA G7.1	Commodity Specification for Air
OPLAN 19-3	Eielson AFB, Hazardous Waste, Used Oil, and Hazardous Material Management Plan
EM 385-1-1	(1996) US ARMY Corps of Engineers Safety and Health Requirements Manual
EPA 340/1-90-018	(1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance
EPA 340/1-90-019	(1990) Asbestos/NESHAP Adequately Wet Guidance

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EPA 560/5-85-024	(1985) Guidance for Controlling Asbestos-Containing Materials in Buildings
NFPA 701	(1999; TIA 96-1, 96-2) Methods of Fire Tests for Flame Resistant Textiles and Films
NIOSH P84-100	(1984; Supplement 1985, 1987, 1988 & 1990) NIOSH Manual of Analytical Methods
8 AAC 61	Occupational, Health and Environmental Control, Toxic and Hazardous Substances
18 AAC 60	Environmental Conservation-Solid Waste Management
UL 586	(1996, rev thru Aug 1999) High-Efficiency, Particulate, Air Filter Units
UFGS 13280	Unified Guide specs 13280 Asbestos Abatement
UFGS 13281	Unified Guide specs 13281 Lead Hazard Control Activities

2.2.7 Qualifications

- A. Designated Competent Person – The Contractor shall use properly qualified and trained personnel to perform duties as the competent person. The person selected shall have prior experience in the administration and supervision of abatement projects, including exposure assessment and monitoring, work practices, abatement methods, disposal procedures and site safety and health requirements.
- B. Supervisors and Workers – The Contractor shall use only properly qualified and trained supervisors and workers for all abatement work. All workers and supervisors shall have current certificates of training for the level of hazardous materials work being performed.
- C. Designated Industrial Hygienist – The Contractor shall select an independent industrial hygienist to prepare the Contractor's Hazardous Materials Abatement Plan, prepare and perform training, direct air monitoring and assist the Contractor's Competent Person in implementing and ensuring that safety and health requirements are complied with during the performance of all required work.
- D. Independent Testing Laboratory – An independent testing laboratory shall be used to perform all testing and analysis required during hazardous materials abatement. The lab shall meet the requirements as set forth in the Unified Facility Guide Specifications, Section 13280, Asbestos Abatement and Section 13281, Lead Hazard Control Activities.
- E. Citations on Previous Projects – The Contractor and all subcontractors shall provide a record of any citations and penalties received from federal, state or local regulatory agencies relating to asbestos or hazardous materials abatement activities performed by the Contractor or subcontractor.

2.2.8 Personnel Program Requirements

- A. Medical Requirements – Medical requirements shall conform to 29 CFR 1926.1101 for asbestos abatement work, to 29 CFR 1926.62 for lead abatement work and to other pertinent federal, state or local requirements.
- B. Training – Supervisor and worker training shall be in accordance with all federal, state and local regulations. In addition, each worker shall be instructed by the Contractors' industrial hygienist on the specific health and safety hazards associated with the project, hazard communication program, specific work practices and controls required, security procedures and the air monitoring program.

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- C. Respiratory Protection Program – The Contractor shall establish in writing and implement a respiratory protection program in accordance with 29 CFR 1926.62 and .1101, 29 CFR 1910.134, ANSI Z88.2, CGA G-7, CGA G-7.1 and the specifications.
 - D. Hazard Communication Program – A hazard communication program shall be established and implemented in accordance with 29 CFR 1926.59.
 - E. Confined Space Compliance Program – If entry into utilidors is required, a written confined space compliance program shall be established and implemented in accordance with 29 CFR 1910.146 and with the COE Safety and Health Requirements Manual, EM 385-1-1, dated 3 September 1996. Figure 6-1 of the COE publication is a flowchart which will be valuable in helping the Contractor in the decision making process.
 - F. Personal Protective Equipment – The Contractor shall provide respirators, protective clothing and eye protection at no cost to the workers. All personal protective equipment shall meet federal, state and local requirements for the type work performed.
 - G. Hygiene Facilities and Practices – The Contractor shall establish a decontamination and shower area for the decontamination of employees, materials and equipment as required by 29 CFR 1926.62 and 1926.1101. The Contractor shall ensure that employees enter and exit the regulated area through the decontamination area.
- 2.2.9 Hazardous Materials Work Plan – The Contractor shall develop and submit a written comprehensive site specific Hazardous Materials Work Plan covering all abatement work to be performed by the Contractor and subcontractors. The Plan shall describe the personal protective equipment to be used, location and description of regulated areas, abatement methods, storage and disposal procedures, sampling and testing procedures, environmental controls, emergency response procedures, schedule and work coordination plans and security procedures.
- A. Licenses, Permits and Notifications – Necessary licenses, permits and notifications shall be obtained in conjunction with the project's hazardous materials abatement, transportation and disposal actions. Timely notifications of such actions shall be furnished as required by federal, state and local regulations. The Contractor is responsible for any fees or costs associated with licenses, permits or notifications.
 - B. Air Monitoring Equipment – The Contractor's industrial hygienist shall approve air monitoring equipment to be used to collect samples. Pumps and sampling cassettes shall be suitable for the contaminate being sampled.
 - C. Expendable Supplies – Glove bags, disposal containers, sheet plastic and other expendable materials shall conform to the requirements of Unified Facility Guide Specifications, Section 13280 and Section 13281.
 - D. Encapsulants – Encapsulants shall meet the requirements identified in Unified Facility Guide Specifications Section 13280 "Asbestos Abatement" and Section 13281 "Lead Hazard Control Activities".
 - E. Materials Safety Data Sheets – Submit Materials Safety Data Sheets (MSDS) and projected quantities of hazardous materials to be used on the job in accordance with Eielson AFB, Hazardous Materials and Waste Management Plan.
- 2.2.10 Methods of Compliance – The Contractor shall employ proper control and handling procedures in accordance with all applicable OSHA, EPA, DOT and Eielson AFB regulations, Unified Facility Guide Specifications, Section 13280, Asbestos Abatement and Section 13281, Lead-

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based Paint Removal. These procedures must be clearly described in the Contractor's Hazardous Materials Work Plan.

- A. Critical Barriers – Critical barriers shall be installed as necessary to prevent the spread of contamination to adjacent work areas or to the public. Critical barriers shall be installed as described in Unified Facility Guide Specifications Section 13280.
 - B. Regulated Areas – All Class I, II, and III asbestos work shall be conducted within a regulated area. The regulated area shall be demarcated to minimize the number of persons within the area and to protect persons outside the area from exposure to hazardous materials.
 - C. Signs and Labels – Danger signs and tape shall be used to demarcate areas where hazardous materials work is being performed and shall be posted at work area entrances, exits, decontamination areas, emergency exits, and waste disposal areas. Warning labels shall be affixed to all components or containers containing asbestos or other hazardous waste in accordance with all federal, state and local regulations.
 - D. Local Exhaust Ventilation – Local exhaust ventilation equipment shall conform to ANSI Z9.2, 29 CFR 1926.62, and 29 CFR 1926.1101. Filters on local exhaust system equipment shall conform to ANSI Z9.2 and UL 586.
 - E. Tools – Vacuums shall be equipped with HEPA filters and have sufficient capacity to efficiently collect, transport and retain asbestos or other hazardous waste. Power tools shall not be used to remove asbestos unless the tool is equipped with an integral HEPA vacuum collection system. Reusable tools shall be thoroughly decontaminated prior to being removed from regulated areas.
- 2.2.11 Final Cleaning and Inspection – Upon completion of abatement, the regulated areas shall be cleaned by collecting, packing and storing all gross contamination. A final cleaning shall be performed using HEPA filtered vacuums and wet cleaning of all exposed surfaces and objects in the regulated area. Upon completion of the final cleaning, the Contractor and Contracting Officers' Representative shall conduct a final visual inspection of the cleaned area in accordance with ASTM E 1368.
- A. Lockdown – Prior to removal of plastic barriers and after completing the final visual inspection requirements, a lockdown encapsulant shall be spray applied to ceilings, walls, floors and other surfaces in the regulated area.
 - B. Clearance Certification – When hazardous materials abatement and final cleanup are completed the Contractor will certify in writing that the area is safe before unrestricted entry is permitted.
- 2.2.12 Exposure Assessment and Air Monitoring – Exposure assessment, air monitoring and analysis of airborne contaminants shall be performed in accordance with 29 CFR 1926.62, 29 CFR 1926.1101 and Unified Facility Guide Specifications, Section 13280 and Section 13281. Edited versions of these sections shall be included in the design after award documents. Exposure assessment and air monitoring shall be performed by the Contractor's independent industrial hygienist. Samples shall be analyzed by the Contractor's independent testing lab.
- 2.2.13 Cleanup and Disposal – All hazardous waste including contaminated filters, scrap, containers, equipment and clothing shall be placed in proper disposal containers for disposal. All asbestos waste shall be disposed of in an EPA/DEC permitted landfill in accordance with 40 CFR 61, state, and local procedures. Lead contaminated waste and other hazardous waste must be handled, stored and transported in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, and Eielson AFB Hazardous Materials and Waste Management Plan. All hazardous

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waste generated on Eielson AFB shall be turned over to the Eielson Hazardous Material Handling and Recycling Facility (HMHRF) located on Eielson AFB. Coordinate with the Eielson AFB, HMHRF for storing, marking, labeling, packaging and disposal of all hazardous waste generated on Eielson AFB.

- 2.2.14 Betterments – Not applicable.
- 2.2.15 Prohibited Items – Not applicable.
- 2.2.16 D/B Contractor Innovations – Not applicable

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.3 CIVIL DESIGN CRITERIA****2.3.1 References**

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. If dates are not given for reference standards or criteria, the latest edition is to be used.
- B. Construction shall be in accordance with the following codes, standards, and regulations. The most stringent shall govern when discrepancies occur.
1. AFH 32-1084, Facility Requirements
 2. AFP 32-1097, Sign Standards Pamphlet
 3. American Disabilities Act Accessibility Guidelines (ADAAG)
 4. Uniform Federal Accessibility Standards (UFAS)
 5. EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual
 6. MIL-HDBK-1190, Facility Planning and Design Guideline
 7. Cold Climate Utilities Manual, Canadian Society for Civil Engineering, 2050 Mansfield Street, Montreal, Quebec H3A 1Z2.
 8. Standard Specifications for Highway Construction State of Alaska - Metric, Department of Transportation and Public Facilities
 9. TI 814-03, Aug 1998, Water Distribution
 10. TI 814-10, Aug 1998, Wastewater Collection
 11. AFM 88-10 Vol.-1/TM 5-813-1 June 1987, Water Supply, Sources and General Considerations
 12. AFM 88-10 Vol.-5/TM 5-813-5, Nov 1986, Water Supply, Water Distribution
 13. AFM 88-11 Vol.-1/TM 5-814-1, Mar 1985, Sanitary and Industrial Wastewater Collection, Gravity Sewer & Appurtenances
 14. AFM 88-3 Chp.-7/TM 5-818-1, Oct 1983, Soils and Geology Procedures for Foundation Design of Buildings and Other Structures (other than Hydraulic Structures).
 15. AFM 88-5 Chp.-4/TM 5-820-4, Oct 1983, Drainage Areas for Other than Airfields
 16. AFM 88-7 Chp.-5/TM 5-822-2, July 1987, General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas
 17. AFM 88-7 Chp.-1/TM 5-822-5, June 1992, Pavement Design for Roads, Streets, Walks, and Open Storage Areas
 18. AFM 88-6 Chp.-8/TM 5-822-7, Aug, 1987, Standard Practice for Concrete Pavements
 19. TM 5-853-1,2,3, May 1994, Security Engineering Design, Volumes 1, 2, & 3
 20. UFC 3-600-01, Design: Fire Protection Engineering for Facilities
 21. UFC 4-010-01, DOD Minimum Antiterrorism Standards for Buildings
 22. Uniform Federal Accessibility Standards, (UFAS); Federal Register. (FED-STD-795)
 23. 18 AAC 72, State of Alaska, Department of Environmental Conservation (ADEC), Wastewater Disposal
 24. 18 AAC 80, State of Alaska, Department of Environmental Conservation (ADEC), Drinking Water Regulations
 25. Eielson AFB Standard Operation Procedures (SOP) for Waste Disposal and Borrow Pit Operations
 26. Hazardous Materials and Waste Management Plan (HMWMP) for Eielson AFB.
 27. Contractor Guidance For Preparing and Executing Storm water Pollution Prevention Plans, ADOT&PF 2nd Edition 1993.
 28. Geotechnical Findings Report (see Appendix 3)
 29. Eielson AFB G-Tabs (see Appendix 1)

SECTION 01010 DESIGN REQUIREMENTS**2.3.2 Designer Responsibility**

- A. The Design-Build contractor's Civil Engineer(s) of Record shall be responsible for the civil design. Complete civil design shall generally include site work, earthwork, grading and drainage, roads and parking, utilities, hazardous material, and coordination of any architectural, mechanical, and electrical site features although they may be shown on other disciplines' drawings. The civil design drawings and calculations shall be sealed and signed by the engineer in responsible charge. The engineer shall be licensed as a civil engineer in the State of Alaska.
- B. The Design-Build contractor's Geotechnical Engineer of Record shall be responsible for preparing foundation design recommendations. The foundation report shall be sealed and signed by the engineer in responsible charge who shall be licensed as a civil engineer in the State of Alaska.

2.3.3 Scope and Objectives

- A. Site work shall consist of the complete design and construction of building site earthwork and grading, access roadways, parking areas, pedestrian walks, site utilities, exterior fire protection requirements, exterior force protection / anti-terrorism provisions, site drainage, and landscaping. The facility shall be completely usable with utility connections and other amenities as described in this document.
- B. Design shall take into consideration topography and natural characteristics of the area, including climatic conditions, prevailing winds, areas of snow accumulation, etc. It shall be the Contractor's responsibility to protect existing features, which include roads, utilities, and similar items not in the contract work limits, which if damaged by the Contractor shall be replaced, in kind at no cost to the Government. Site work and utility designs shall provide a functional development requiring only routine maintenance through its design life. Emphasis shall be placed on positive drainage, separation of dissimilar soil materials, and minimizing heave and subsidence. Site planning, development and the Contractor's operations shall at all times take into consideration that other facilities bordering the site must remain fully operational during the performance of the work.

2.3.4 Arctic Climate

- A. Arctic conditions exist at the Project Site. Snow begins accumulating in late September/October and does not begin to melt until March/April. It is common to have one meter of snow cover through mid March. Refer to Section 0800 for climatological summary.

2.3.5 Topographic Survey

- A. The project site survey of the proposed site location shows the topography, roads, utilities, and other surface features. The Contractor shall review and field verify the topographic survey information and be responsible for all additional survey(s) required to complete requirements of these documents.
 - 1. Project Survey Control - Survey monuments listed on the survey shall be used as the horizontal and vertical reference control points for work performed by the Contractor.
 - 2. Protection of Monuments - Existing survey monuments shall be protected during construction from movement and damage. Damaged monuments shall be replaced, to the original order of survey accuracy, at no cost to the Government.
 - 3. Not all underground utilities may be shown on the topographic survey provided. Contractor is responsible for obtaining utility locates prior to starting any earthwork.

SECTION 01010 DESIGN REQUIREMENTS**2.3.6 Exterior Fire Protection**

- A. Connection for water for both domestic and fire protection can be made to the existing utilidor located on the south side of Division Street.

Flow Data: Fire Hydrant 32-01 (directly across from construction area near Vehicle Maintenance Shop) 806 gpm (Pitot pressure = 23 psi; Static pressure = 50 psi); Fire Hydrant 32-02 (corner Wabash Ave & Division St near Vehicle Maintenance Shop) 806 gpm (Pitot pressure = 23 psi; Static pressure = 50 psi).

- B. New exterior fire hydrant(s) will be required for this project to provide required exterior fire water requirements per UFC 3-600-01.
1. All parts of the building exterior must be within 106 meters of a hydrant with consideration given to accessibility and obstructions. Hydrants must also be located with consideration given to emergency vehicle access.
 2. At least one hydrant must be located within 45 meters of the fire department connection.
 3. Hydrants must be installed adjacent to paved areas, accessible to fire department apparatus. Hydrants shall not be closer than 1 meter nor farther away than 2.1 meters from the shoulder or curb line. Bollards shall be provided for physical protection.
- C. Hydrants shall be UL listed and FM approved, manufactured by Kennedy or Waterous (Eielson AFB preferred) or equal. Hydrants shall be dry barrel type with 150 DN minimum legs. Laterals to hydrants shall be in utilidors with steam heat trace and a manhole at the tie-in to the utilidor main.
- D. See 01010.2.8 - Fire Protection Design Criteria, for interior fire protection requirements.

2.3.7 Munitions Separation

- A. The new CSFC site does not have any munitions separation requirements to adjacent sites or facilities.

2.3.8 Force Protection / Anti-terrorism

- A. The new CSFC facility shall meet the requirements of UFC 4-010-01, DOD Minimum Antiterrorism Standards for Buildings for force protection and anti-terrorism. GOV's are required to park adjacent to and inside the new building. Parking for POV's is also required. The CSFC site is bounded on three sides by public streets.
- B. Site features may be utilized to meet force protection objectives.
1. All non-GOV vehicles must be restricted by physical barriers from parking or driving within 25 meters of any portion of the building. Barriers may include fencing, retaining walls, ditches, or other suitable means. Boulders or Jersey barriers shall not be utilized. Bollards may be used at sidewalks and drives.
 2. The access drives for the GOV's that park adjacent to or inside the building shall be controlled by vehicle gates. Gates shall be electrically operated with key pad activation.
 3. Provide security fencing around the GOV secure parking and access areas adjacent to the building.
 4. Trash receptacles and dumpsters shall be located outside the security fence and a minimum of 25 meters from any portion of the building.

2.3.9 Site Layout and Design

- A. The site layout and design shall meet the minimum provisions of all applicable references and as described herein.

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- B. The Contractor shall confine proposed development to the project area as designated in these RFP documents.
 - C. The limits of the project site are shown on the Site Plan, C1.0, in Appendix 1.
 - 1. Protect existing utility lines when new parking or driving areas are constructed above them. When the depth of cover over utilities, structural load, or thermal regime is changed, the utilities shall be redesigned for the altered conditions. New underground utility lines (including utilidors, manholes, vaults, etc.) shall not be located under roads, parking areas or drainage ditches, except at crossings or unless there is no practical alternative.
 - 2. All site access to the building shall be accessible per ADAGG.
 - 3. Siting requirements for the new CSFC building include minimum setback distances from existing streets to meet force protection requirements.
 - 4. Access to the CSFC site can be from any of the adjacent streets.
 - D. The site layout shall allow for building footprint adjustments to incorporate betterments.
 - E. The site layout shall allow for a future 465 SM expansion of the facility to house Office of Special Investigations (OSI) operations. This expansion will consist of an addition to the building.
- 2.3.10 Landscaping
- A. Landscaping shall be according to the Eielson AFB Site and Landscape Development Plan. Landscaping shall be limited to seeding of areas disturbed by construction to provide erosion control and ground cover. Landscaping will be required at both the new CSFC site and at demolition sites.
 - B. Work shall consist of grading, placing 150 mm of topsoil, applying seed, and maintenance until grass is 100 mm in height.
 - 1. Follow the recommendation of the Eielson Site & Landscape Development Plan and as approved by the Base Comprehensive Planner or Environmental Resource Division for seed. Seeding shall be completed prior to August 1.
 - 2. Topsoil shall be fertile, friable soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, clay or impurities, plants, weeds and roots, refuse or foreign materials; minimum pH value of 5.4 and maximum 7.0.
 - 3. Fertilizer shall be of standard commercial types supplied separately or in mixtures and furnished in moisture-proof containers. Each container shall be marked with the weight and the manufacturer's guaranteed analysis of the contents showing the percentage for each ingredient contained therein. The proportion of chemical ingredients furnished shall be a mixture such as to provide the total available nitrogen, phosphorus and potassium as required by the soil analysis or as soil analysis indicates. Tolerances of the chemical ingredient shall be plus or minus 2%. No cyanide compound or hydrated lime will be permitted in the mix.
- 2.3.11 Geotechnical
- A. A geotechnical findings report for this project has been provided by the Government, see Appendix 3. It shall be the Contractor's responsibility to provide any additional fieldwork deemed necessary. The Contractor shall verify all government-furnished information. It is the Contractor's responsibility to investigate the subsurface soil conditions, groundwater table and soil resistivity, etc. and obtain adequate geotechnical data to determine recommendations for utility installation, trench sections and transition requirements, soil bearing capacity, foundation design, consolidation/settlement criteria, roadway or parking structural sections, waterproofing design, and all other necessary site work geotechnical criteria to provide project requirements.

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- B. The site is underlain by soils that are susceptible to liquefaction during seismic events. The new CSFC facility is an essential facility due to its occupancy as a police station. The foundation design shall address the requirement for the facility to remain operational after a seismic event.
 - C. Surface runoff that enters excavations may become contaminated if soils are contaminated. Dewatering of surface runoff from excavation shall include sampling and testing and treatment as required.
 - D. The Contractor shall prepare a geotechnical design analysis for all work performed for this project. The geotechnical design analysis shall be submitted for review with the 65% design submittal. The analysis shall include evaluation of soils and liquefaction, bearing capacity, settlement calculations, lateral earth pressures, temporary and permanent dewatering designs, foundation design, effects of arctic climate including frost transition recommendations. Design shall be in accordance with TI-809-4, AFM 88-3 Chp-7/TM 5-818-1, AFM 88-7 Chp-1/TM 5-822-5, the Cold Climate Utilities Manual, IBC 2000, followed by other references of choice. Organize the design analysis into the following sections:
 - 1. Site: Overall geotechnical analyses of the project site.
 - 2. Building: Analysis and design of foundation type.
 - 3. Utilities: Analysis and design for buried utility system.
 - 4. Traffic systems: Analysis and design for each type of traffic system, i.e., road, parking area, etc.
 - E. Final Geotechnical Report - The Contractor shall submit five (5) copies of the final report, in booklet form, to the Contracting Officer within 30 days of the final earthwork activity. The report shall include:
 - 1. The Contractors Geotechnical Design Analysis.
 - 2. Field Screen Information. Include the SAP, an explanatory narrative of the work performed, observations, typical photos, map showing the location and type of test(s), and a table of field screening and other test results that is updated as work proceeds.
 - 3. Compaction Test Plan and Data.
 - 4. Calibration of Equipment. List of equipment, copies of calibration curves and results of calibration tests for each, and observations on the correlation between field and laboratory tests results.
 - F. Soil boring logs shall be included in the final design drawing package. Soil boring locations shall be shown on a site drawing.
- 2.3.12 Earthwork
- A. Material may be obtained from Eielson AFB borrow areas or from an off base source. The Contractor shall verify the type of material needed for the project is available from the Eielson AFB borrow areas. It will be the contractors' responsibility to grade, crush or otherwise process as required for use on this project. Any material type not available shall be obtained from an off base source.
 - 1. A preliminary Eielson AFB Waste Disposal and Borrow Pit Areas Plan is included in Appendix 6. To request authorization to use on-base waste disposal and borrow pit areas, the Contractor shall complete and submit Pages 1 and 2 of the Eielson AFB Waste Disposal / Borrow Pit Coordination Review, which is found in Appendix 6, to 354 CES/CEVN (907) 377-5128, no later than the 35 percent design review package. 354 CES/CEVN will prepare a final Eielson AFB Waste Disposal and Borrow Pit Areas Plan for this project. The final plan may differ from, and will supercede, the preliminary plan included in Appendix 6. The Contractor shall comply with the final plan. Using the final plan, the Contractor shall prepare an Environmental Protection / Borrow Pit Plan following the example in Appendix 6 and submit to 354 CES/CEVN for approval. The 354 CES/CEVN and CEVQ must approve the Contractor prepared Environmental Protection /

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Borrow Pit Plan prior to commencing work. For Non-Government Borrow Source requirements, see Section 01015.

2. No government owned equipment is available for Contractor use for any gravel extraction activities.
3. Upon completion of the work covered by this contract, the Contractor shall leave the borrow areas and adjacent premises in a satisfactory condition, with free drainage to adjacent drainage area. Contractor shall level out all piles except for those stockpiled for future use. All spills shall be cleaned up.

- B. Materials shall be classified in accordance with the ASTM D2487 and compaction efforts shall be specified by ASTM standards.
- C. Soil material used as structural fill and backfill shall be well-graded non-frost susceptible materials consisting of sand, gravel, broken stone, or similar material and containing not more than 60 percent by weight passing the No. 4 sieve. All material shall be free of frozen lumps. Material shall not exceed a size equaling 2/3 of the specified maximum lift thickness. Non-frost susceptible soils are inorganic soils containing less than three percent by weight of grains finer than 0.02-mm. The methods of test used shall be the ASTM C 117, ASTM C 136, ASTM D 75, and ASTM D 422.

2.3.13 Contaminated Soils

- A. The soil above the groundwater table at the CSFC site and demolition sites is assumed to be clean. Soil remediation is not in the scope of this project. If any contamination is found, contact the Contracting Officer and 354 CES/CEVQ (907-377-7745) immediately. A copy of contamination analysis shall also be provided.
- B. The groundwater adjacent to and under a portion of the CSFC site is contaminated.
 1. CERCLA Site ST58, located south of the site and bounded by Wabash and Division, contains POL and lead constituents.
 2. CERCLA Site SS64, located south east of the project site and bounded by Division, contains TCE and PCE constituents.
 3. CERCLA Site SS61, located south east of the project site and bounded by Division, contains BTEX, TCE, and PCE constituents.
- C. The contractor shall, to the extent practical, avoid excavations into the water table and dewatering. Excavations that must occur into the water table shall be designed by the contractor to limit the extent of dewatering required, even if the water is not contaminated. The excavation design shall provide a cutoff wall around the excavation to prevent changes to the groundwater gradients in the area during dewatering that may effect adjacent contamination plumes in the area. Any dewatering required during construction shall be coordinated with the Contracting Officer and 354 CES/CEVR (907) 377-1164 because of potential impact on plume migration.
 1. Prior to any dewatering occurring, the Contractor shall obtain a site specific dewatering permit through ADEC. The Contractor shall submit the permit application to 354 CES/CEVR for review prior to submission to ADEC.
- D. The Contractor shall provide field screen soil sampling throughout the duration of excavation activities to determine if contamination is present in the soils. The Sampling and Analysis Plan (SAP) shall include the Field Sampling Plan (FSP) and the Quality Assurance Program Plan (QAPP). The Contractor shall immediately notify, by writing and phone, the CO if contamination is discovered. The Base Environmental Office shall be responsible for providing notification to ADEC. Contaminated soils procedures do not apply to the gravel extraction site operation. Contractor is not required to provide field screen soil sampling at the gravel extraction site operation.

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- E. Sampling and Analysis Plan (SAP) - The Contractor shall prepare and submit a Sampling and Analysis Plan (SAP) to the Contracting Officer for approval. The SAP shall reflect the degree of complexity of the project and shall be composed of a Field Sampling Plan (FSP) and a Quality Assurance Program Plan (QAPP). The plans shall include method to be used for field screening and frequency of sampling. Field screening shall be utilized according to prudent, professional judgment. The Contractor shall exercise a high degree of control over field screening in conjunction with construction in order to adequately screen for POL contaminated soil.
 - F. The Contractor's shall use a Hydrocarbon Vapor (HV) test or other appropriate field test to qualitatively check for the presence or absence of soil contamination where visible stains are not apparent. The Contractor shall include in the SAP a description of the type of instruments selected, limits, action levels, procedures for testing, and training to use the instruments and interpret the data.
- 2.3.14 Geotechnical Testing
- A. Compaction tests shall be performed on each layer of compacted material placed at a frequency determined by the Contractor's designers to verify proper installation of materials. Testing shall be the responsibility of the Contractor and shall be performed by a Corps of Engineers approved independent testing agency. The Contractor shall remove and replace nonconforming materials and shall recompact and retest failed and replaced areas until the specified degree of compaction is obtained. The Contracting Officer may direct that the tests be taken at locations other than those shown on the submitted compaction test plan and that additional tests be taken to supplement these required tests.
 - B. Compaction Test Plan and Data - The Contractor shall submit the compaction test plan to the Contracting Officer prior to beginning earthwork activities on the work item. Plan and Data shall include:
 - 1. Compaction Test Plan - Shall show the exact location of each test. This plan shall be keyed to the test results.
 - 2. Test Record - The record of each test shall reflect the type of test procedure(s), the firm or person that performed the test, the project title and contract number.
 - 3. Test Results and other Data - Log and compile the results of each test and any observation made, and for compaction tests, the volume or unit weight of the standard, and the volume or unit weight of the compacted soil.
 - C. Compaction Tests - Characteristics of backfill materials shall be determined in accordance with particle size analysis of soils ASTM D 422 and moisture-density relations of soils ASTM D 1557. A minimum of one particle size analysis and one moisture-density relation test shall be performed on each different type of material used for bedding and backfill.
 - D. Gradation and Non-frost Susceptibility Tests - Tests shall be conducted on structural soil materials for structures, utility systems, and roadways, driveways, and parking areas to verify the material meets the requirements set forth by the final design.
- 2.3.15 Site Grading and Storm Drainage
- A. Requirements described herein and further defined in AFM 88-7 Chp-5/TM 5-822-2 and AFM 88-5 Chp-4/TM 5-820-4 shall be incorporated into the design.
 - B. Building Finish Floor Elevation - The Contractor shall establish the finish floor elevation of buildings to provide positive drainage away from the building. All building entrances and approaches shall meet ADAAG and UFAS requirements.

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- C. Site Grading - Finish grade adjacent to the building shall be 150 mm below the finish floor elevation, except at doors. Site grading, parking, etc., shall be sloped to drain to the existing drainage patterns. Non-paved drainage slopes away from the building shall be a minimum of 5 percent for a horizontal distance of 3 meters, and be graded 2 percent slope thereafter to existing and/or new (as necessary) drainage collection point(s). Banks of earthwork cuts or embankments, ditches, etc, shall not be steeper than one vertical to three horizontal. The preferred slope for permanent banks and ditches is one vertical to four horizontal. Optimum desired slope for site grading is 2 percent. Minimum slope is 1 percent.
- D. Storm Drainage Design - New site drainage shall maintain predominant existing drainage patterns. Storm drainage calculations, including runoff from adjacent properties, and discharge volume shall be based on a 10 year storm event. Additional ditches and culverts shall be provided on the site as necessary for positive drainage. Areas experiencing consolidated flow, roof drain outlets, roof drip lines, parking lots, drainage swales, etc. shall be designed with features to prevent erosion. Use of culverts should be minimized to avoid stoppage of flow due to ice damming and glaciations. If culverts are used, they should be oversized and/or means of thawing shall be provided.
1. Existing Drainage System - There is no piped storm drainage system at the site. Storm water currently infiltrates into the ground.
 2. New Drainage System - The preferred method is to drain storm water by surface flow into new grass areas or northerly to the existing grass area for infiltration.
 3. Contaminated Water - The design shall provide for collection and treatment of runoff from snow storage areas and from paved areas. The major concern is vehicular oils and sediment load. The design shall include calculations and references' showing the method of treatment provided is adequate.
 4. Construction Period - Runoff from within the project boundaries, during construction of the project, shall be the responsibility of the Contractor, including all NPDES permits (as necessary) or requirements. Silt laden or other environmental degrading waters shall be collected and treated prior to discharge from the project site to existing drainage system.
 5. Preferred Methods - The preferred method of handling rain and snowmelt is overland gravity flow to grassy swales and collection ditches for filtering. The preferred method of treating runoff from parking lots and snow storage areas is allowing flow through grassy areas (land treatment). Runoff from roof drains and gutter collections systems must be directed away from buildings without causing winter glaciating or erosion. Insulated and heat traced drain lines may be required to direct runoff away from the building.
 6. Storm Water Pollution Prevention Plan - Contractor shall prepare and submit to ADEC and the Contracting Officer and 354 CES/CEVR for review a SWPPP and conduct all construction activities in accordance with the approved plan. The plan shall, as a minimum, include the following items: methods for clearing/grubbing, temporary erosion and sediment control measures, Best Management Practices (BMP's) on-site, excavation/embankment construction, temporary and permanent drainage features, haul roads/material stockpile sites, construction in and around water bodies/existing drainage features, containment control, cleanup and disposal methods of petroleum products or other hazardous substances generated by construction equipment or activities. The plan shall also address BMP's for post-construction activities and operation of the facility. Contractor is responsible for all fees associated with the NPDES, SWPPP, and ADEC review and permits. Contractor shall complete the Notice of Intent and Notice of Termination and submit to Contracting Officer, EPA, and ADEC.
 7. Contractor shall submit design drawings to ADEC for a Storm Water review.
- E. Floor Drains - Piped floor drains shall be connected to the sanitary sewer system.
1. Parking Garage shall use piped floor drains. Floor drain water shall be routed through a coalescing plate oil/water separator prior to discharge to the sewer.
 2. Mobility Bays shall not use piped floor drains. Floor shall drain to evaporation trenches or pits within the bays.

SECTION 01010 DESIGN REQUIREMENTS**2.3.16 Vehicular Traffic Systems**

- A. General Design - Includes access roadways, overhead door approaches and parking areas. The Contractor shall layout traffic improvements to be functional to the users, with strong emphasis on safety. Traffic systems shall be designed and constructed to the provisions of MIL HDBK-1190, and to provide accessibility for the handicapped in accordance with ADAAG and UFAS requirements. The geometric layout and pavement section of each type pavement or traffic system shall be designed in accordance with TM 5-822-2 and TM 5-822-5.
1. Intersections - As applicable, design all intersections to local standards, and to allow WB-50 design vehicles to make 90 degree turns without maneuvering outside of lanes, whichever is more stringent.
 2. Asphalt Surfacing. All driveways, main entrance, handicap parking stalls, vehicle parking areas and circulation areas shall be asphalt surfaced. Pavement structural section shall be designed for HS20 highway loading, and also capable of supporting vehicles up to a maximum gross vehicle weight (GVW) of at least 32,000 kg. All materials used in AC Pavement shall conform to the requirements of the State of Alaska 1988 Standard Specifications for Highway Construction and any applicable Federal, AFM and MIL-HDBK-1190 requirements. Layer thickness shall be according to the geotechnical design, however, the thickness of the base course layer shall be no less than 100 mm and the thickness of asphalt layer shall be no less than 75 mm.
 3. Transverse Gradients - Roads and parking areas shall have gradients in accordance with AFM 88-7 Chp-5/TM 5-822-2 and AFM 88-7 Chp-1/TM 5-822-5. Gradients shall not exceed a maximum 3 percent slope due to winter ice conditions and in no case be less than 1 percent, to avoid ponding.
 4. Curbs and gutters are not required except at interface with sidewalks around buildings.
 5. Pavement Markings - Pavement shall be marked according to ADOT Standard Specifications for Highway Construction. Handicapped painted symbols and signage will be required at all barrier-free parking spaces.
 6. Emergency and Service Vehicles - Provide fire truck access to main fire department connection and all hydrants. Provide vehicle access to the mechanical room. Provide adequate paved access for emergency and service vehicles and account for turning radii of trucks of the size expected to utilize the facility.
 7. Snow Removal and Storage - Snow removal and convenient storage shall be considered in the design and layout of all roadways and parking areas. Snow shall be stored on site. Grader and front-end loaders are used to remove snow. Snow storage shall be convenient to the removal area without excessive haul distances. Provide adequate storage for a heavy snow year assuming a maximum seasonal snow depth of 2 meters on all roadways and parking areas.
- B. Provide parking for 132 POV's outside of secure areas, including handicap stalls. Provide parking for 18 GOV's - 12 Air Force and 6 Air National Guard, located inside of secure areas. Parking stalls shall be 3 meters by 6 meters.
- C. Provide head bolt heater outlets for all exterior parking.
- D. Sufficient vehicle maneuvering area shall be provided outside the vehicle doors for Parking Garage and Mobility Bays. A minimum of 25 meters of maneuvering space shall be provided outside each door to allow entering and exiting of vehicles and equipment. The Parking Garage shall be designed for drive through vehicle routing.

2.3.17 Pedestrian Traffic Systems

- A. Design and geometric layout shall be in accordance with AFM 88-7 Chp-5/TM 5-822-2. Consider both vehicular and pedestrian circulation in design of pedestrian traffic systems.

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1. Sidewalks shall extend from all building entrances. Sidewalks shall be concrete. Sidewalks shall be a minimum of 1800 mm wide except where handicapped access requirements dictate greater width and 2400 mm wide for walkways to building entrances. Transverse slope of sidewalks shall be 2 percent minimum and 4 percent maximum, except where requirements for handicapped access govern.

- B. Pedestrian access shall meet ADAAG and UFAS requirements.

2.3.18 Utility Systems

- A. Before beginning work, the Contractor shall become familiar with all existing utility systems, to verify the location of existing utilities and other information shown on Appendix 1 drawings. The Contractor is responsible for supplementing government provided information as necessary to design and construct new work.
- B. The materials and equipment furnished shall be the standard product of the manufacturer. Where two or more units of the same item, type, or class of equipment are supplied, these units shall be from a single manufacturer.
- C. The Contractor shall notify the Contracting Officer before a utility tie-in is required. The notification shall be made a minimum of 10-days before tapping the line. Utility system shutdown(s) for tapping/tie-in(s) shall be made within a four (4) hour planned utility outage. The Contractor shall submit a work plan for utility tie-in/tap work prior to beginning the specified utility work. Connections between new work and existing utility mains shall be made with standard fittings, specials, using methods for on-site conditions and Manufacturers recommendations. The Contracting Officer shall approve the method of constructing connections under pressure before work begins. Contractor shall make provisions to provide temporary utilities to all facilities affected by outages longer than four (4) hours in duration.

2.3.19 Utilidors

- A. All new domestic water, fire water (including laterals for hydrants), sanitary sewer, steam, and condensate piping located exterior to buildings shall be constructed in new concrete utilidors. Electrical service and communications shall not be located in the utilidor.
- B. A new service utilidor shall be installed between the existing main utilidor on the south side of Division Street and the new CSFC mechanical room. The service utilidor shall be sized to accommodate different piping arrangements, ditch or road crossings, or any other constraint.
 1. The minimum interior size for service utilidors shall be 1200 mm by 1200 mm.
 2. Pipe placement shall allow for required separation to walls, adjacent pipes, and allow for maintenance access.
- C. The existing utilidor and manholes are considered confined spaces and may be asbestos contaminated environments. New work will require breaking out a section of existing manhole and/or utilidor walls, constructing new manholes and utilidors, and connecting new piping to existing systems. The Contractor shall review the Hazardous Material Report, and refer to Section 2.2 for requirements for asbestos remediation in the areas of existing utilidor system that will be impacted by new work. Work in the utilidor shall be limited to the minimum area necessary to perform new work.
- D. All utilidors shall have removable lids and be of watertight construction. Utilidors shall be buried. The Contractor shall use extreme caution when forming and placing inside edge and top of walls to provide smooth even surfaces to accommodate utilidor lids, as it is critical to providing a watertight system.
 1. No structures and/or appurtenances shall be supported from the utilidor tops.

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2. Utilidor and lids shall be designed for HS-20 traffic loading in all vehicle traffic areas.
 3. Lids shall be sized so the weight is less than 1,800 kg and shall have non-deformed lifting loops or eyes of ASTM A 36 galvanized steel unless a stronger steel or superior finish is required.
 4. Provide a urethane foam sealant with waterproof coating for a gasket material (or approved equal) between wall and removable lid.
 5. The below ground exterior of all concrete manhole and utilidor side and tops shall be waterproofed.
- E. Utilidors shall have constant slope between manholes for drainage. The floor of the utilidor shall be flat without gutters or drainage channels.
- F. Where utilidor crosses through paved traffic, parking or other structural improvement area, Contractor shall provide a trench excavation frost transition section to mitigate potential soil discontinuity and differential heave/settlement issues. Contractor shall include all frost transition recommendations in the Geotechnical Design Analysis. Utilidors in traffic areas shall have a 150 mm thick layer of 415 kPa (minimum) compressive strength insulation placed above the utilidor lid. The insulation shall extend 1.5-meters (minimum) beyond the outside edge of the utilidor on each side of the utilidor.
- G. The finished grade in the vicinity of the utilidor shall have sufficient slope to prevent ponding and to transport water away from the utilidor.
- H. The utilidor shall be completely blocked off (flush with the interior surface of the Mechanical Room pit) where the utilidor enters a building. The wall shall be constructed of fully grouted concrete block or cast-in-place concrete. Pipes shall pass through cut-off walls with pipe sleeves. The wall shall be steam-tight, no weep holes or open spaces shall pass through the cut-off wall.
- I. Steam and condensate piping are the heat source for the utilidor. Insulate piping and utilidor to maintain an interior temperature between 5 degrees C and 35 degrees C for the range of exterior air temperatures identified in Section 0800. Insulate water piping to prevent temperatures rising above 5 degrees C at the average daily flow rate. Provide two dimensional heat loss analysis for each different size of utilidor and different condition such as ditch crossings, traffic areas, non-traffic areas, etc. Insulation shall be placed on the exterior of the utilidor sufficient to maintain the thermal conditions specified.
- J. The Contractor shall heat the new utilidor system (including manholes), or any existing utilidor when they are subject to freezing temperatures, or when the normal thermal regime is altered by new work. Temperatures shall be constantly and adequately monitored. When the utilidor sections or manholes are insulated and backfilled, the structures shall be heated such that the minimum interior air temperature is 5 degrees C at all locations. When the utilidor sections or manholes are not backfilled, the entire structure, including external surfaces or enclosed air spaces within 1 lineal meter of the structure's walls, shall be heated to a minimum 5 degrees C.
- K. A new manhole is required at the connection point of all new service utilidors to the existing utilidor.
1. New manholes shall be constructed of reinforced concrete. Manholes shall be watertight. Manhole sidewalls shall be constructed by one monolithic pour. Where connections to existing manholes are required, the Contractor shall break open the manhole to the minimum extent necessary for adequate tying of the new construction to the old. The maximum distance between utilidor manholes shall be 60 meters. Utilidor manholes shall be constructed at locations wherever the utilidor changes in cross sectional dimension or floor gradient. Manholes shall not be located in traffic areas or ditches. No structural elements or appurtenances shall be supported from manhole tops other than the access

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ladder, electrical hardware, except structural elements that can not be located elsewhere and the manhole shall be structurally designed for the supported item.

2. Manhole shall be sized to provide a minimum of 600 mm of clear space between the edge of manhole and pipe components. Size manhole to provide sufficient room for maintenance, removal, and movement of equipment. There shall be adequate space to move equipment to a location directly below the access hatch without dismantling other pipe system components.
3. Provide an access hatch having 1,000 mm (minimum) clearance in each dimension.
4. Frames and covers shall be of the solid lid type and have a minimum masonry contact of 75 mm overlap. Frames and covers shall be proof-load tested 450 kg loading.
5. Hatch covers shall be a one or two lid style with external (non-recessed) butt-type hinges securely attached to the frame that shall not work loose under repeated opening and closing of the lids. Lids shall have fixed protruding handles (non-recessed) with a minimum clear hand opening of 125 mm by 65 mm and have chains or other positive means to prevent lids from slamming open and loosening hinges.
6. Ladder shall be constructed of straight-type steel that is not less than 400 mm in width with rungs spaced 300 mm apart. The ladder shall be adequately anchored to the wall by means of steel inserts spaced not more than 1,750 mm apart vertically, and shall be installed to provide at least 170 mm of toe space between the wall and the inside of the rungs.
7. Provide sumps that have a minimum size/volume of 600 mm deep by 600 mm diameter in each manhole. Provide sump pumps with a minimum capacity of 40-l/min. Sump pumps shall be of the submersible type capable of operating while completely submerged and shall be electrically driven with a cord and plug connection to power. The pump and motor shall be capable of pumping liquids at a temperature of 95 degrees C. The motor shall have sufficient power for the service required, and shall be furnished complete with overload protection. A submersible switch assembly shall automatically control the pump. Wiring from switch to pump shall be waterproof type cord suitable for submersion in 95 degrees C liquids. Provide an independent float level to indicate emergency high level to be connected to an emergency warning light mounted on the manhole. The warning light shall be mounted to be visible from the road on a 100 DN diameter pipe securely attached to the manhole top. The on-off levels shall be set according to the manufacturer's recommendations.
8. All manholes shall have a natural convection style vent system designed that is comprised of two vent pipes located in diametrically opposite corners. Vents shall be 200 DN (minimum) diameter steel pipes coated for corrosion protection. One vent pipe shall terminate approximately 100 mm below the manhole ceiling; the other shall terminate approximately 300 mm above the manhole floor. Vent pipes shall be adequately capped, rise to 1,000 mm above the normal level of snow accumulation, and be designed for the expected interior and exterior temperatures.
9. Provide lighting and two outlet receptacles in all manholes.
10. Provide a hose bib in each manhole with vacuum breaker.

2.3.20 Utility Piping

- A. Pipe, fittings, valves, and appurtenances shall conform to the Eielson AFB Standards for Utilidors, see Appendix 14.
- B. All pipe within the utilidor shall be supported, anchored, and have provisions for controlled expansion and contraction. The Contractor shall design pipe anchors, thrust restraint, provisions for expansion/contraction, joints, hangers and supports for the pipe system and type of joints installed. The Contractor shall fully design these items, determining the number needed and the location of each.
 1. All equipment requiring inspection or maintenance including but not limited to expansion joints, isolation valves, blow downs, and clean-outs shall be located in manholes.
 2. Anchors shall be attached to utilidor walls using through bolts with back plates.

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- C. Steam and condensate piping shall be sized to provide adequate heating for the new facility.
1. Pipe shall be carbon steel, black, ASTM A106. Schedule 40 shall be used for steam over 50 DN pipe size. Schedule 80 shall be used for steam 50 DN and smaller and all condensate.
 2. Joints shall be butt welded or socket welded.
 3. Valves over 50 DN shall be 150# ANSI flanged with spiral wound ring gaskets. Studs shall be ASTM A193, Grade B7. Valves 50 DN and smaller shall be screwed.
 4. Steam expansion joints shall be internally and externally guided, Hyspan 3500 or similar.
 5. Condensate expansion joints shall be injection packed, Hyspan 6500 or similar.
 6. Tees, weld-o-lets or thread-o-lets shall be used for branch connections, depending on size.
 7. Steam piping low points shall have full size drip pockets with trap connections at mid point and drains at bottom. Traps shall be bimetallic thermostatic, Velan SF-150 or similar. Traps shall discharge into top of main through thread-o-let with one pipe size smaller long radius elbow welded inside of o-let discharging in direction of flow.
 8. High points shall have vents.
 9. Insulate with calcium silicate with aluminum jacket and stainless steel bands in areas of high traffic. Use foam glass or calcium silicate without jacket in low traffic areas.
- D. The water and sewage systems shall be designed and constructed in accordance with the criteria contained herein and shall also conform to Alaska Department of Environmental Conservation (ADEC) requirements, as applicable.
1. ADEC review(s) and/or approval(s) in accordance with 18 AAC 80 and 18 AAC 72, may be required, per the scope of the project improvements. Contractor shall confirm ADEC approval/permit requirements; submit and obtain all necessary ADEC approvals prior to beginning any work, including payment of fees. Copies of the Approval to Operate shall be provided to the Contracting Officer and 354 CES/CEVQ.
- E. Water service main shall be sized to provide adequate quantity at sufficient pressure of potable water to satisfy both facility domestic and fire flow requirements. Water demand shall be in accordance with UFC 3-600-01 and local standards and codes. The potable water system shall meet the most stringent requirements of those in 18 AAC 80, TM 5-813-1, TM 5-813-5, National Standard Plumbing Code, UFC 3-600-01, and NFPA Codes.
1. Pipe shall be ductile-iron or steel material. Pipe shall be cut accurately to measurements established at the site by the Contractor and shall be worked into place without springing or forcing. Care shall be taken not to weaken structural portions of the utilidor or manholes. Changes in pipe sizes shall be made with reducing fittings. Use of long screws and bushings will not be permitted. Pipe and fittings connected to anchors shall be steel material.
 2. Ductile iron pipe shall have asphalt coated exterior, cement-mortar lined interior, be rated for a 1,030-kPa working pressure, in accordance with AWWA C151.
 3. Steel pipe shall be concrete lined in accordance with AWWA C200, with dimensional requirements as given in ASME B36.10 for pipe 150 DN in diameter and larger, and ASTM A 53 for smaller sizes. Pipe shall be a welded or seamless with ends processed appropriately for the specified joints or couplings. Pipe sized 200 DN to 460 DN in diameter shall be Schedule 20, minimum. Pipe 150 DN and smaller in diameter shall be Schedule 40, minimum.
 4. Fittings and specials shall be of similar material and ratings as adjacent pipe.
 5. Joints shall be flanged or mechanically coupled with rigid groove. Flexible grooved joints, or push-on or restrained push-on joint fittings are not allowed. Welded joints shall not be used except where other specified joints are not feasible. Welded joints shall be approved for each location required.
 6. Isolation valves are required at the water/fire service connection to the existing water main, at all tees, crosses and fire hydrant legs. Provide a drain on the building side of the isolation valve.

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7. Cold water lines, including valves and fittings, throughout utilidors shall be covered with either extruded polystyrene, polyurethane and/or polyisocyanurate insulation. The insulation shall have the joints buttered with mastic in such a manner as to fill all insulation joints and to prevent any future passage of vapor to the cold water pipe after the assembly is complete. The insulation shall be adequately secured to the pipe with rust-resistant type bands, placed not over 300 mm on centers.
 8. Aluminum-jacket shall be provided over insulation on cold water lines in the manholes and to a distance of 1.5 meters into the new utilidors including valves and fittings. Aluminum jackets shall be corrugated, embossed or smooth sheets having minimum thickness of 0.9064-mm nominal and factory applied moisture barrier.
 9. Plugs, caps, tees and bends on all waterlines 100 DN diameter or larger, and on fire hydrants, shall be provided with concrete or structural steel thrust blocking, anchors or metal tie rods and clamps or lugs as required by NFPA Code.
 10. After the pipe system is completed and the fire hydrants are permanently installed, the newly laid piping or any valved section of water piping or fire line shall be subjected to a hydrostatic pressure test. Test shall be for a period 2-hours with a pressure of 1,380 kPa, or 1.33 times the working pressure, whichever is greater. Each valve shall be opened and closed several times during the test. Exposed pipe, joints, fittings, valves and hydrants shall be carefully examined during the test. No leakage will be allowed. Joints showing visible leakage shall be replaced or remade as necessary.
 11. Each completed water and fire line shall be disinfected as prescribed by AWWA C651. The line will not be accepted until satisfactory results have been obtained from water samples submitted by the Contractor to a laboratory certified by the State of Alaska to perform testing for coliform bacteria. Chlorinated water shall not be discharged to the environment. The Contracting Officer shall approve the method proposed for disposal of wastewater from disinfection before beginning the process.
- F. Sanitary sewer shall be designed as a force main from the new CSFC building to the existing gravity sewer located in the existing utilidor on the south side of Division Street. Refer to section 2.6 for building sewage lift station technical requirements. The sewer system shall meet the most stringent requirements of those in 18 AAC 72, TM 5-814-1, TM 5-814-2, or the National Standard Plumbing Code.
1. Piping for sewer lines shall be ductile iron or steel. The minimum working pressure shall be 1,030 kPa for forced main sewer and 345 kPa for gravity sewer.
 2. Provide Y-style cleanouts at all utilidor manholes. Orient cleanout in opposite direction of flow.
 3. After the force main pipe system is completed, the newly installed piping shall be subjected to a hydrostatic pressure test. Test shall be for a period 2 hours with a pressure of 1,380 kPa, or 1.33 times the working pressure, whichever is greater. Exposed pipe, joints and fittings shall be carefully examined during the test. No leakage will be allowed. Joints showing visible leakage shall be replaced or remade as necessary.
 4. Insulation is not required.
- 2.3.21 Security Fence
- A. Provide security fencing to provide secure access to Mobility Bays and Parking Garage. Fencing shall conform to UFC 4-010-01, Eielson Excellence Plan, and TM 5-853-1,2,3.
 1. Fence will need to be robust enough to meet force protection requirements.
 - B. Provide one electric operated vehicle gate with touch key pad access so security personnel can drive into and out of secure fenced areas without exiting vehicles.
 - C. Provide direct personnel access from secure fenced area into building.

SECTION 01010 DESIGN REQUIREMENTS**2.3.22 Miscellaneous**

- A. Dumpster Storage Area - Provide a concrete central dumpster storage pad with adequate room for truck access. Dumpster pad shall be reinforced concrete with CMU screening fence, sized for two standard size dumpsters of the type used at the site and shall provide adequate room for access of the dumpster loading truck. The dumpsters shall be located a minimum of 25 meters from the building.
- B. Electrical Transformer Pad - Provide concrete foundation for electrical transformer. Provide architectural screening fence with gate for maintenance access. Locate transformer to conform to physical security requirements for the building.
 - 1. Provide transformer manufacturer data and shop drawing to electric shop and 354 CES/CEVQ.
- C. Screening fences shall be constructed of CMU with slatted chain link gates per Eielson AFB standards.
- D. Building Sign - Provide building identification sign per Eielson AFB standards.

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.4 ARCHITECTURAL DESIGN CRITERIA****2.4.1 Building Design and Building Systems – General**

- A. Construction Summary - The following nine categories are organized based on occupancy and function. Uses shall be combined in one structure to conserve total building materials, heating load, exterior pedestrian circulation, total gravel pad footprint; see Room Criteria Sheets for specific requirements by area.
1. Administrative Offices and Support Spaces
 2. Assembly Classrooms, Training Facilities, Open Ranks, CATS, Break Rooms and Conference Rooms
 3. Mobility Bays, Supply, Storage and Support Spaces
 4. Armories and Munitions Storage
 5. Restrooms and Locker Rooms
 6. Parking Garage
 7. Circulation, Corridors, Lobbies and Arctic Entries
 8. Mechanical, Electrical and Communication Rooms
 9. Fan Room
- B. Code Summary – Conform building construction to fire resistance requirements, allowable floor area, building height limitations, and building separation distance requirements of the IBC, except as modified by UFC 3-600-01. Comply with NFPA 101 for building construction related to egress and life safety. For conflicts between the IBC and NFPA 101 related to fire resistance rating, conform to NFPA 101 and applicable criteria contained in UFC 3-600-01. Fire resistance ratings of non-bearing partitions in Type II construction, comply with NFPA 101. Occupancy separation walls must comply with the IBC 2000. Fire areas shall conform to the IBC 2000, except as modified by UFC 3-600-01. Contractor must support proposal design with a full code analysis per IBC 2000, UFC 3-600-01, NFPA 101, in addition to all referenced codes and standards. Section 00100 and 00120 define proposal submittal and design after award code study requirements. Preliminary assumptions are as follows:
1. Construction type and occupancy type (IBC 2000, UFC-3-600-01)
 - a) Construction Type
 - 1) IBC Section 602.2: II-B, (non-combustible)
 - 2) Fire Suppression systems required (NFPA 13)
 - b) Occupancy, mixed
 - 1) A3: Assembly/Conference/Classrooms
 - 2) B: Administrative Areas
 - 3) S-1: Mobility Bays/Storage
 - 4) H-1: Munitions Storage
 - 5) S-2: Parking Garage
 2. Occupancy Separation (per IBC Table 302.3.3 and D/B Proposer's design):
 - a) A-3/B Occupancy Separation – 2 hour
 - b) A-3/S-1 Occupancy Separation – 3 hour
 - c) A-3/S-2 Occupancy Separation – 2 hour
 - d) B/S-1 Occupancy Separation – 3 hour
 - e) B/S-2 Occupancy Separation – 2 hour
 - f) S-1/S-2 Occupancy Separation – 2 hour
 - g) H-1 Occupancy is not permitted with any other occupancy (directed by Military to defer to MIL-HDBK-1013/1A for design of Armory/ Munitions Storage)
 3. Allowable Height and Building Area and Area Modifications (IBC Section 503, Table 503 and Section 506). Allowable areas for Construction Type IIB:
 - a) Occupancy Group A-3 is 882.6 square meters

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- b) Occupancy Groups B is 2316.7 square meters
 - c) Occupancy Group H-1 is 650.3 square meters
 - d) Occupancy Group S-1 is 1625.8 square meters
 - e) Occupancy Group S-2 is 2415.4 square meters
 - f) Note: per UFC 3-600-01 Section 2-2, "The Air Force permits the allowable area to triple in any building when an approved automatic sprinkler system is installed..."
- 4. Fire Walls (IBC Section 705): Openings shall be protected in accordance with IBC Section 714.2 and shall not exceed 11.1 square meters. The aggregate width of openings at any floor level shall not exceed 25 percent of the length of the wall.
 - 5. Fire Barriers (IBC Section 706): Openings shall be protected in accordance with IBC Section 714. Openings shall be limited to maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 11.1 square meters.
 - 6. Both AD and ANG Armory Vaults shall be designed per MIL-HDBK-1013/1A Table 14, and must comply with DoD 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives. Arms and Munitions are classified as Categories II, III & IV per Appendix 1 of DoD 5100.76-M.
 - 7. Mezzanine (IBC Section 505): as applicable with D/B Proposer's design.
 - 8. Minimum Egress Requirements: per NFPA 101 and UFC 3-600-01.
 - 9. Handicap Accessibility per ADAAG and UFAS. All facilities/functions must comply with ADAAG UFAS. AD Locker Room locker/bench areas are not required to comply with ADAAG and UFAS.
 - 10. Design wind load – The basic wind speed used in wind load calculations shall be 40 m/s, Exposure B.
 - 11. Roof system shall meet Factory Mutual I-90 Wind Uplift Standards for wind speeds up to 160 kph.
- C. Acoustical Design - Building walls and partitions will meet or exceed the minimum criteria defined in the Room Criteria Sheets area for all program areas. FIIC 57 (Field Impact Isolation Class), and FSTC 52 (Field Sound Transmission Class) are the minimum for office areas adjacent to shop or public areas. Telephone, cable, outlets, ducts, and any other penetrations must not compromise acoustical integrity of wall assemblies. Offerors are encouraged to use acoustical and space planning to minimize intrusive exterior noise, equipment vibration, and noise transfer to occupied spaces.
- D. Site and Climate Considerations - Natural lighting shall be designed to enhance interior spaces.
- 1. Space planning shall address delivery of daylight to circulation and staff areas where possible. Operable windows in staffed areas are preferred over fixed pane units.
 - 2. Vehicle exhaust, noise, and maintenance activities shall be isolated to the extent possible from assembly and office areas.
 - 3. Attention to design for natural ventilation will keep the offices, circulation, and assembly areas cool during the summer months and protect from temperature fluctuations during the winter months.
 - 4. Building and roof forms shall address snow drifting, water runoff and wind buffeting at building entrances and Vehicle overhead doors.
 - 5. Air National Guard spaces are to be on the west end of the building to be closer to existing Air National Guard "campus."
- E. Building Design Consideration
- 1. Building Size/Shape Relationship to Size and Orientation of Site – Building siting and configuration is determined by lot configuration, access to and from adjacent roadways, utilidor and parking requirements.
 - a) There are no anticipated encroachments.
 - 2. Organization of functional spaces and adjacency requirements is based on Government provided documents, drawings and Design Charette results.

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3. There are no SCIF or Tempest construction requirements.
4. Building Layout and Circulation for Services, Materials/Equipment, Egress – Building shall most probably be laid out such that all sides of the building have vehicular circulation. The building plan is to be organized into two functional areas with shared or overlap spaces as follows:
 - a) The 354th Security Forces Squadron contains staffed areas, training, circulation, support and utility spaces.
 - b) The 168th Security Forces Squadron contains staffed areas, training, circulation, support and utility spaces.
 1. Betterment 2 – Add 74.3 square meter ANG Mobility Supply function; see 1.2.9 Government-Proposed Betterments and Room Criteria Sheets.
 - c) Shared spaces include the site parking and access, arctic entries, main lobby, CATS training room, classroom, main communications room, mechanical room, electrical generator room, utility and support spaces.
 1. Betterment 1 – Add 162 person fixed seating, sloped floor Lecture Hall; see 1.2.9 Government-Proposed Betterments and Room Criteria Sheets.
5. Consolidation of Spaces into Sound-Compatible Zones
 - a) The CATS room is extremely loud and must be acoustically isolated from the rest of the building.
 - b) The AD Commander's Office and adjacent spaces need to be isolated from through traffic and physically separated from other functions by man doors.
6. Space Layout Relative to Structure and Environmental Support Systems - Utility spaces require separate, exterior access and internal circulation for Base maintenance personnel. Administrative offices and support spaces should be organized to take advantage of natural daylighting and equipped with operable windows where possible.
7. Construction Materials Basis for Selection – No and low maintenance finishes selected for durability and context to neighboring structures.
8. Building Expandability and Changeability
 - a) Design Charette determined that the building needs to be able to accommodate a future 464.5 SM Office of Special Investigations (OSI) addition with stand-alone mechanical, communications and entrance access.
 - b) Should Betterment 2 not be developed, the building needs to be designed to accommodate a 74.3 square meter addition of ANG Mobility Supply.
9. Energy Conservation – See Section 01010 – 2.4.4 Roof Construction, 2.4.5 Exterior Wall Construction, & 2.4.6 Doors and Windows.
10. Acoustical Design – Administrative areas, classrooms, and training areas will be acoustically isolated from adjacent spaces and circulation areas. Special attention must be applied to acoustical isolation of CATS Room, Electrical Generator/Electrical Room and Mechanical Room. Use space planning design to isolate these spaces for acoustically sensitive areas (conference rooms, offices, training rooms classrooms, break rooms, etc.). Fan Room Equipment Mezzanine cannot be located above acoustically sensitive areas.
11. Parking Garage and Mobility Bays are intended to be large open spaces. Columns are not allowed in Parking Garage or Mobility Bays. In the Parking Garage, the wash rack should be located away from man door points of access. In Mobility Bays, a pull-through configuration is the desired design solution. Pull-in bays are an acceptable design alternative for AD only.
12. Overhead doors and man doors must be protected from rain, snow, ice, and roof runoff.
13. Floors slope to interior floor drains at a minimum slope of 3.2 mm/.3 m
14. Wainscots shall be used in public areas to provide lower wall protection and aesthetic value. Offerors may propose creative solutions, and designs will be evaluated based on appearance, durability and cost.

2.4.2 References and Standards

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- A. The publications listed below form the regulatory standards of this specification. Construction shall be in accordance with the following codes, standards, and regulations. If dates are not given for reference standards or criteria, the latest edition at the time this document is released shall be used. The most stringent shall govern where discrepancies occur. The A-E shall follow the instruction and guidance included on the CD provided by the Government entitled "Engineering Instructions", which is also known and referred to as "Section J". See the subsequent discipline narratives in this Section for additional regulatory standards, codes, and references.
1. AAMA American Architectural Manufacturer's Association Guide Specifications Manual
 - a) 608 Methods for Electrolytically Deposited Color Anodic Finishes
 - b) 1503 Method for Thermal Transmittance and Condensation Resistance of Windows, Doors, and Glazed Wall Sections
 2. AATCC American Association of Textile Chemists and Colorists
 - a) 134 Electrostatic Propensity of Carpets
 3. ADAAG American Disabilities Act Accessibility Guidelines
 4. Air Force
 - a) AFH 32-1084
 - b) AFI 31-209
 - c) AFI 32-1023
 - d) AFMAN 91-201
 - e) Eielson Air Force Base Architectural Compatibility Plan
 - f) NGR (AF) 82-2
 5. AISC American Institute of Steel Construction
 - a) Specifications for Structural Steel Buildings
 - b) S334L Metric Load and Resistance Factor Design
 - c) S335 Specification for Structural Steel Buildings
 - d) Allowable Stress Design, Plastic Design
 6. AISI American Iron and Steel Institute
 - a) Cold-Formed Specification and Commentary for the Design of Cold-Formed Steel Structural Members
 - b) Cold-Formed Steel Design Manual
 7. ANSI American National Standards Institute
 - a) A 151.1 Test Procedure and Acceptance Criteria for Physical Endurance
 - b) A 208.1 Particleboard Material Formed Woods
 - c) A 224.1 Test Procedure and Acceptance Criteria for Prime Painted Steel Surface for Steel Doors and Frames
 - d) A 250.8 Recommended Specifications for Standard Steel Doors and Frames
 - e) Z 97.1 Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings
 8. ANSI/AWS D 1.4 Welding Reinforcing Steel, Metal Inserts and Connections in Reinforced Concrete Construction; Structural Welding Code – Reinforcing Steel
 9. ASTM American Society for Testing and Materials
 - a) A 36M Standard Specification for Structural Carbon Steel
 - b) A 53M Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
 - c) A 123M Standard Specification for Zinc (Hot Dipped Galvanized) Coatings on Iron and Steel Products
 - d) A 153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - e) A 167 Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
 - f) A 307 Steel Bolts and Studs, 60,000psi Tensile Strength
 - g) A 325 Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 KSI Minimum Tensile Strength
 - h) A 463/A 463M Standard Specification for Steel Sheet, Aluminum Coated, by the Hot-Dip Process

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- i) A 500 Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
- j) A 570M Standard Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Structural Quality
- k) A 653M Zinc-Iron Alloy (galvannealed) by the Hot-Dip Process
- l) A 792M Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process, General Requirements for
- m) A 924M Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
- n) B 221 Standard Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
- o) C 33 Concrete Aggregate
- p) C 36M Gypsum Wallboard
- q) C 79M Treated Core and Non-treated Core Gypsum Sheathing Board
- r) C 109M Compressive Strength of Hydraulic Cement Mortars
- s) C 144 Standard Specification for Aggregate for Masonry Mortar
- t) C 150 Standard for Portland Cement
- u) C 215 Standard Test Method for Fundamental Transverse, Longitudinal, and Torsional Frequencies of Concrete Specimens
- v) C 236 Steady-State Thermal Performance of Building Assemblies by Means of A Guarded Hot Box
- w) C 272 Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Construction
- x) C 348 Test Method for Flexural Strength of Hydraulic Cement Mortars
- y) C 474 Joint Treatment Materials for Gypsum Board Construction
- z) C 475 Gypsum Wallboard Joint Compound and Joint Tape for Finishing Gypsum Board
- aa) C 494M Chemical Admixtures for Concrete
- bb) C 518 Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- cc) C 531 Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, and Monolithic Surfacings and Polymer Concretes
- dd) C 578 Specification for Rigid, Cellular Polystyrene Thermal Insulation
- ee) C 630 Water-resistant Gypsum Backing Board
- ff) C 635 Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and for Lay-in Panel Ceilings
- gg) C 636 Standard Installation of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
- hh) C 834 Specification for Latex Sealants
- ii) C 840 Standard Specification for Application and Finishing of Gypsum Board
- jj) C 882 Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete by Slant Shear
- kk) C 920 Standard Specification for Elastomeric Joint Sealants
- ll) C 1028 Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method
- mm) C 1036 Standard Specification for Flat Glass
- nn) C 1047 Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base
- oo) C 1107 Specification for Non-shrink Grout
- pp) C 1172 Standard Specification for Laminated Architectural Flat Glass
- qq) D 226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
- rr) D 522 Mandrel Bend Test of Attached Organic Coatings
- ss) D 822 Conducting Tests on Paint and Related Coatings and Materials Using Filtered open-Flame Carbon-Arc Exposure Apparatus
- tt) D 968 Abrasion Resistance of Organic Coatings by Falling Abrasive

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- uu) D 1211 Standard Test Method for Temperature-Change Resistance of Clear Nitrocellulose Lacquer Films Applied to Wood
- vv) D 1308 Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- ww) D 2247 Practice for testing Water Resistance of Coatings in 100% Relative Humidity
- xx) D 2794 Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- yy) D 2842 Standard Test Method for Water Absorption of Rigid Cellular Plastics
- zz) D 2843 Standard Test Method for Measuring the Density of Smoke from the Burning or Decomposition of Plastic
- aaa) D 3273 Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environment Chamber
- bbb) D 3363 Test Method for Film Hardness by Pencil Test
- ccc) D 4397 Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
- ddd) D 4637 EPDM Sheet Used in Single-Ply Roof Membrane
- eee) E 84 Standard Test Method for Surface-Burning Characteristics of Building Materials
- fff) E 90 Laboratory Measurement of Airborne Sound Transmission Class (STC) Loss of Building Partitions
- ggg) E 108 Standard Tests Method for Fire Tests of Roof Coverings
- hhh) E 119 Standard methods for Fire Tests of Building Construction and Material
- iii) E 283 Test Method for Determining the Rate of Air Leakage through Exterior Window, Curtain Walls, and Doors under Specified Pressure Differences Across the Specimen
- jjj) E 330 Standard Test Method for Structural Performance of Exterior Window, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
- kkk) E 331 Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
- lll) E 336 Method for Measurement of Airborne Sound Insulation in Buildings
- mmm) E 413 Rating Sound Insulation
- nnn) E 648 Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
- ooo) E 662 Test Method for Specific Optical Density of Smoke Generated by Solid Materials
- ppp) E 773 Standard Test Method for Accelerated Weathering of Sealed Insulating Glass Units
- qqq) E 774 Standard Specification for the Classification of the Durability of Sealed Insulating Glass Units
- rrr) E 814 Method for Fire Tests of Through-Penetration Fire Stops
- sss) E 1264 Standard Classification for Acoustical Ceiling Products
- ttt) F 476 Test Methods for Security of Swinging Door Assemblies
- uuu) F 1303 Standard Specification for Sheet Vinyl Floor Covering with Backing
- vvv) F 1861 Standard Specification for Resilient Wall Base
- www) G 23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) with and without Water for Exposure of Non-metallic Materials
- 10. AWI Architectural Woodwork Institute - Architectural Woodwork Quality Standards
- 11. AWS American Welding Society
 - a) A5.1 Specification for Carbon Steel Electrodes for Shielded Metal Arc Welding
 - b) D1.1 Structural Welding Code Steel
 - c) WHB-01 Welding Handbook, Volumes 1 thru 5 (8th Edition)
- 12. BHMA Builders Hardware Manufacturers Association
 - a) A 156.4 Door Controls and Closers
 - b) A 156.6 Architectural Door Trim
- 13. CFR Code of Federal Regulations

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- a) 29 Part 1926 Safety and Health Regulations for Construction
- b) 29 Part 1926 Subpart C – General Safety and Health Provisions
- c) 29 Part 1926 Subpart T – Demolition
- d) 16 CFR Part 1201 Safety Glazing Safety Standard for Architectural Glazing Materials
- e) 49 CFR 101-19.6 Uniform Federal Accessibility Standards
- 14. Cisca Ceiling and Interior Systems Construction Association - Acoustical Ceilings Use and Practice
- 15. COE Corps of Engineers
- 16. CRI Carpet and Rug Institute
 - a) Carpet Specifiers Handbook
 - b) Standard for Installation of Textile Floor Covering Materials
- 17. DoD Department of Defense Specifications
 - a) DoD-P-21035 (Rev. B) Paint, High Zinc Dust Content, Galvanizing Repair (Metric)
 - b) DoD 5100.76-M Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives
 - c) DoD 4-010-01 Minimum Antiterrorism Standards for Buildings
- 18. GANA Glass Association of America Energy Standards Manual
 - a) Glazing Manual
 - b) Sealing Manual
- 19. GA Gypsum Association
 - a) GA 201 Gypsum Board for Walls and Ceilings
 - b) GA 216 Application and Finishing of Gypsum Board
 - c) GA 600 Fire-Resistance Design Manual
- 20. GSA General Services Administration
 - a) CID A A 50542 Coating System: Reflective Slip-Resistant Chemical-Resistant Urethane for Maintenance Facility Floors
 - b) AA-D-600D Federal Specification Door, Vault, Security
- 21. IBC International Building Code 2000 Edition
- 22. MIL Military Handbook 1013/1A
- 23. NAAMM National Association of Architectural Metal Manufacturers
 - a) NAAMM 500 Metal Finishes Manual for Architectural and Metal Products
- 24. NEMA National Electrical Manufacturers Association
 - a) LD3 High Pressure Decorative Laminates
 - b) LD3.1 Performance, Application, Fabrication, and Installation of High Pressure Decorative Laminates
- 25. NFPA National Fire Protection Association
 - a) NFPA 80 Fire Doors and fire Windows
 - b) NFPA 101 2003 Life Safety Code
- 26. NRCA National Roofing Contractors Association
 - a) Low Slope Roofing Materials Guide
 - b) Steep Slope Roofing Materials Guide
- 27. SIGMA Sealed Insulating Glass Manufacturers Association Recommended Practices
- 28. SJI Steel Joist Institute Specifications, Load Tables, and Weight Tables for Steel Joist Girders
- 29. SMACNA Sheet Metal and Air Conditioning Contractors' National Assoc. Architectural Sheet Metal Manual
- 30. SPC The Society for Protective Coatings
 - a) SP5 White Metal Blast Cleaning
 - b) SP6 Commercial Blast Cleaning
- 31. TCA Tile Council of America – Standards
- 32. TI 809-04
- 33. TM Technical Manual – Army Publication Distribution Center
- 34. UFAS Uniform Federal Accessibility Standards
- 35. UFC Unified Facilities Criteria

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- a) 2-600-1
- b) 1-200-01
- c) 3-600-01
- 36. UL Underwriters Laboratories
 - a) 10B Fire Tests of Door Assemblies
 - b) 305 Panic Hardware
 - c) 723 Test for Surface Burning Characteristics of Building Materials
 - d) 752 Bullet-Resisting Equipment
 - e) 790 Tests for Fire Resistance of Roof Covering Materials
 - f) Outline Test Method for Measuring the Surface Flame Propagation Characteristics of Flooring and Floor Covering Materials
- 37. WWPA Western Wood Products Association

2.4.3 Designer Responsibility

- A. The Design-Build contractor's Architect of Record shall be responsible for the design of the life safety and architectural systems for the building. Complete architectural design for the building shall include life safety and code review documentation and detailing of all architectural systems to insure compliance with all life safety provisions of the regulations as well as local zoning and Base specific requirements for architectural systems. The architect will coordinate with the rest of the Design-Build team to insure that all disciplines are made aware of the overall code requirements and regulations governing the building design. The architect shall be licensed as an architect in the State of Alaska.

2.4.4 Submittals

- A. Submittals and shop drawings shall be prepared by suppliers and submitted to the contractor and architect of record for review and approval. Provide copies of final approved submittals bearing the contractor's and architect of record's review stamps to the Corps of Engineers.

2.4.5 Building Construction and Systems - The following descriptions of specific building elements are considered minimum requirements.

- A. Building Foundation, Pilings, Grade Beams and Slab - Reinforced cast in place concrete floor slab (see 2.5 Structural Design Criteria). Concrete slab compositions are determined by structural criteria for different uses.
 - 1. Option 1 - Under floor radiant heat in both Mobility Bays and Parking Garage
 - 2. Provide equipment pads for floor mounted equipment and vibration isolation pads at compressor and generator equipment.
 - 3. Construction joints, either formed or saw cut or cut with a jointing tool, to the indicated depth after the surface has been finished. Sawed joints shall be completed within 4 to 12 hours after concrete placement. Protect joints from intrusion of foreign matter.
 - 4. Expansion joints at edges of interior floor slabs on grade abutting vertical surfaces, and required locations 15mm; fill expansion joints not exposed to weather with preformed joint filler material.
 - 5. Moisture Barriers
 - a) Vapor Retarder - Capillary Water Barriers such as sand, gravel, or crushed stone shall be provided beneath membranes at slabs-on-grade with dampproofing. At walls, drainage matting may be used instead.
 - b) Waterproof Paper – ASTM C 171 consisting of (2) sheets of Kraft paper cemented together with reinforced bituminous material.
 - 6. Expansion/Contraction Joint Filler – ASTM D 1751 or ASTM D 1752, 15mm thick unless otherwise indicated.

2.4.6 Roof Construction

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- A. Main roof must be of sloped metal standing seam design with a 5:12 pitch. Secondary roof areas, such as wings, should be at least 3.5:12. Minor roof areas, such as entry canopies, may be sloped metal with at least 3.5:12 pitch or low slope design. Roof run-off must be directed away from building apron, fire lanes, pedestrian circulation, building entrances, and exits. All roof construction, eaves and other elements shall prevent the nesting of cliff swallows during and after construction. EPDM single-ply roofing is required for any low slope roof areas. Gable end roof overhangs shall shelter overhead door openings to the greatest extent possible. Roof eave shall be 300 mm minimum depth and no greater than 600 mm deep. Avoid long roof valleys; roofs shall be ventilated cold roofs.
- B. Building main entrance and secondary exit door openings shall be protected from rain, snow, ice and roof run-off. Canopies shall be designed to protect against sliding snow. Uninsulated standing seam metal roof system is permitted at main entry canopy, personnel doors and secondary exits. Building mounted lighting and equipment, shall be protected from water, snow, and ice roof runoff damage.
- C. Warranty: 20-year full roofing system manufacturer's warranty that all roof systems will be free from leaks caused by defects in materials supplied and 10-year full roofing system manufacturer's warranty that all roof systems will be free from leaks caused by workmanship involved in the installation of such materials. Materials, installation details and penetrations shall comply with manufacturer's best practices and industry standards. Warranty shall cover the entire cost of repair or replacement, including all material, labor, and related markups.
- D. Details and Penetrations shall comply with NRCA Construction Details. Sloped metal roofing shall comply with Metal Roofing Manual. EPDM roofing shall comply with Low Slope Membrane Roofing Construction Details, NRCA Roofing and Waterproofing Manual, and NRCA Handbook of Accepted Roofing Knowledge.
- E. Roofing Components, Sloped Metal Roof - .607 mm (24 gauge) standing seam, factory finish, furnished in single length; rubberized underlayment of 1mm self adhering membrane; 75 mm (minimum) vent space; structural steel decking; steel roof trusses; vapor retarder; 16 mm Type 'x' gypsum board; total roof assembly R-value = R-57 to R-60 including the following accessories:
1. IMSA Klip-Rib factory formed standing seam roof panel assembly or equal product designed for concealed mechanical attachment to roof deck are acceptable.
 - a) .759 mm (22 gauge) minimum panel thickness.
 - b) Comply with manufacturer requirements for span limitations.
 - c) Clips shall be .835 mm (21 gauge) designed to meet negative load requirements.
 - d) Zincolume Aluminum zinc alloy coated steel sheet per AZM 165, Class AZ-55.
 2. Provide flashing and trim as recommended by panel manufacturer to match wall or roof panels.
 3. Provide the following components for a metal roofing system
 - a) Secondary roof membrane under metal roofing such as Grace Ice and Water Shield.
 - b) Provide ventilated roof deck for maximum performance. Ensure system exceeds minimum code requirements. Provide minimum 75 mm deep air passages running up the roof from eaves to high point.
 - c) Provide thermal break between exterior primary structural supports for the roof and any secondary metal framing to support insulation.
 - d) Vapor retarder between interior and roof insulation.
 - e) Ridge vents which prevent wind-blown precipitation from entering.
 4. Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs and other suitable fasteners designed to withstand design loads.
 - a) Use stainless steel fasteners

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- b) Use metal-backed neoprene washers under heads of fasteners exposed to weather.
- 5. Accessories for a complete installation shall be provided, including: trim, copings, fascia, ridge closures, seam covers, battens, flashings, sealants, gaskets, fillers, and closure strips – per industry standards.
- F. Roof Components – Low Slope Roof (for minor roof areas), structural metal deck 16mm Dens-deck, vapor barrier, R38 rigid insulation, protection board (compatible with EPDM system and warranty), single-ply EPDM membrane; metal flashings. Minimum slope 1:50.
 - 1. Acoustical Roof Deck: 38mm metal deck or alternate product of equal performance and required structural properties.
- G. Roof Accessories – roofing assembly components shall be compatible with the single-ply EPDM roofing manufacturer requirements.
 - 1. EPS Insulation – ASTM C 578, Type II expanded polystyrene; (2) 101.6 mm board thickness layers, (1) 50.8 mm board thickness layer with the following characteristics:
 - a) Water Absorption Rate: Maximum 4 percent per ASTM C 272
 - b) Board Density: Minimum 35.98 Kg/cu meter, minimum
 - c) Compressive Strength: Minimum 0.7031 kg/sq cm at 10 percent deformation
 - d) Thermal Conductivity K Factor: 0.28 at 23.9 ° C per ASTM C 518, minimum R38 insulation value as tested at 23.9 ° C
 - e) Board edges: Square
 - 2. Asphalt Impregnated Cellulose Fiberboard – ASTM C 208, 11.1 mm thick oriented strand board or as otherwise required by code, UL requirement, and EPDM roofing manufacturer for the roof warranty.
 - 3. Joint Tape – asphalt treated glass fiber reinforced, 152.4mm wide, self-adhering.
 - 4. Fasteners – types and sizes best suited for the purpose and shall comply with listing and roofing manufacturers approved instructions.
 - 5. EPDM Membrane
 - a) Fully adhered single-ply membrane conforming to ASTM D 4637, Type I EPDM Grade 1; Class U 1.92mm minimum thickness. Membrane and accessory flashings, solvents, and sealants, etc. shall be part of a complete and compatible system in compliance with manufacturer best practices and warranty requirements.
 - b) Flashing shall be UV resistant materials.
 - c) Protection board shall be fastened to the structural steel deck using wood blocking as a thermal break (to avoid thermal and vapor breach through the assembly) in conformance to FM Class I-90 system.
 - 6. Metal Flashings – prefinished and preformed galvanized sheet stock; ASTM A 924M, Grade C minimum, 24 ga; coating designation Z275 in conformance with A 653M, or 1.9 mil Zincalume coating compound of 45 percent zinc and 55 percent aluminum alloy by weight per ASTM A 792. Form sections true to shape, accurate in size, square, and free from distortion or defects. Form pieces in longest practicable lengths. Minimum bend radius 3.5 x metal thickness. Form bends at room temperature. Hem exposed edges on underside 12.7 mm; miter and rivet lap seam corners. Provide double beads of sealant in laps. Form material with backup plate seams of same material. Fabricate formed vertical faces with bottom edge formed outward and hemmed to form drip and hook for concealed cleats and back-up plate seams. Provide 24 ga flashings with 22 ga continuous concealed cleats on exterior face, minimum 50.8 mm wide, interlockable with flashing.
 - a) Exposed Finish – shop applied baked-on epoxy primer and baked on PVF2, finish coat, Prefinishing system equal to PPG's Duranar, DeSoto's Fluoropon, or Glidden's Nubelar; 70 percent "Kynar 500" coating in total dry film thickness of 1 mil.

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- b) Concealed Finish – shop applied baked on .15 mil epoxy primer and baked-on .35 mil off-white backer.
 - 7. Flexible Flashings – flexible flashings for elastomeric roof.
 - 8. Parapet wall shall be 200 mm higher than the roof membrane's highest point. Top of parapet wall shall be flashed with a metal parapet cover secured on the exterior side mechanically crimping the parapet cover over a sheet metal cleat, and secured on the roof side with non-corrosive surface-mounted fasteners having 3mm thick neoprene gaskets. Parapet cover fastening shall conform to the wind uplift criteria of Factory Mutual Loss Prevention Data Sheet 1-49 for Zone 2.
 - 9. Roof hatches, roof mounted equipment, ducts through roof, and stacks shall be supported on curbs. Curbs shall have elastomeric flashing and metal counter flashing protecting the top edge.
 - 10. Roof envelope shall form inverted pyramids with primary roof drains located low points.
 - 11. Roof drainage details shall comply with NRCA Construction Details, and EPDM roofing manufacturer's recommended details. Overflow roof drains shall be provided on all roofs with parapets or curbs. The weight of retained water below the level of the overflow roof drains shall be included as a load in structural calculations. Drains shall have strainers, and shall be no less than 101.6 mm diameter.
 - a) Only interior roof drains and overflow roof drains shall be used in a low-slope roof area. Roof drain spacing shall not exceed 23 meters in any direction; no single roof drain shall serve a roof area greater than 558 square meters. Overflow drain must be 50 mm higher than its paired primary roof drain.
- 2.4.7 Exterior Wall Construction – See 2.5 Structural Design Criteria for concrete footing, foundations, concrete stem wall and structural steel framing. All products shall be fire and safety rated for the use and locations intended. Structural elements shall be fire protected per IBC requirements. Exterior color scheme shall conform to Eielson AFB Architectural Compatibility Plan.
- A. Exterior wall assembly - Split face integrally colored CMU: split face concrete masonry units, integrally stained and sealed, (1) layer, rigid board insulation adhesively applied to inside face of CMU, metal stud furring with fiberglass insulation, vapor retarder; 16mm gypsum wall board. Total wall assembly R value = R-28 to R-30.
 - B. Metal stud wall furring and framing shall comply with ASTM C754 for conditions indicated. Steel sheet components shall comply with ASTM C645 and with manufacturer standard corrosion resistant zinc coating.
 - 1. Steel studs and runners shall be .7 mm base metal thickness.
 - 2. Steel studs in exterior walls shall comply with structural criteria.
 - 3. Accessories for complete framing system for fire rated and non-fire rated assemblies include: firestop track, 79 mm flat strap and backing plate, cold rolled channel bridging (1.37 mm bare steel thickness), hot shaped rigid furring channels (.45 mm thick per ASTM C645), resilient furring channels (12.7 mm deep), corrosion resistant fasteners of type/material/size/properties required to fasten steel members to substrates.
 - 4. 16 mm Gypsum Wall Board (type "X" where required) up to 3050 mm gypsum interior wall face complying with ASTM C 36, and installed in compliance with ASTM C 840 and GA 216.
 - C. Wainscot in Mobility Bays - Offerors may propose creative solutions for wainscot in Mobility Bays, and designs will be evaluated based on appearance and durability.
 - D. Waterproof wainscot in Parking Garage – 101.6 mm concrete masonry units with epoxy paint finish, full height at Parking Garage Wash Rack. Offerors may propose creative solutions for wainscot in remainder of Parking Garage, and designs will be evaluated based on appearance, durability and cost.

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- E. Fiberglass batt insulation, ASTM C 612 minimum (R-13), unfaced, sized to fit snugly between framing members without gaps or voids.
- F. Vapor retarder, continuous 8-mil film per ASTM D4397 requirements, at the warm side of the insulation.
- G. Dampproofing – conforming to ACI Guide to the Use of Waterproofing, Dampproofing, Protective and Decorative Barrier Systems for Concrete shall be used at foundation walls and other building elements that are subject to high humidity, dampness, or frequent direct water contact; but are not subject to hydrostatic pressure or immersed in water.
 - 1. Waterproofing shall be used at shower room walls (if masonry), water wash-down areas, and other areas subject to hydrostatic pressure.
 - 2. Dampproofing shall be used at concrete stem walls, transition areas where membrane waterproofing (if any) terminates, and other areas susceptible to dampness. At through-the-wall flashings dampproofing shall form a bond between the concrete and flashing.
 - a) Dampproofing at and below grade shall be chemically compatible with ground water and soils
- H. Exterior Perimeter Insulation – Conforming to ASTM C 578 Type VI, extruded cellular type, with the following characteristics:
 - 1. Thermal Resistivity: R of 5.0 per mm at 24°C.
 - 2. Thickness - 50 mm
 - 3. Board Size - 600 mm x 1200 mm, square edges.
 - 4. Compressive Strength - 2.1 kg/sq cm, minimum
 - 5. Water Absorption - Per ASTM D 2842, 0.3 percent by volume, maximum.
 - 6. Adhesive: Gun grade, mastic type, compatible with insulation and substrate.
 - 7. Protective Coating - Acrylic copolymer based adhesive and waterproof coating mixed with Portland cement, suitable for protecting insulation from ultraviolet and physical damage and extending 150 mm below grade.

2.4.8 Doors and Windows

- A. Exterior Aluminum Windows, with the following performance requirements
 - 1. Force Protection Glazing - All exterior glazing shall meet the minimum resistance standards in UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings.
 - a) All exterior glazing shall be insulating glass with a laminated inner pane. Inner panes of insulated glass units shall be 6 mm laminated annealed glass or 6 mm laminated thermally tempered glass. Laminated glass shall consist of two layers of Type I transparent float glass, Class 1 – clear Quality q3 – glazing select, conforming to ASTM C1036.
 - b) Glass shall be bonded together with 1.52 mm thick PVB interlayer under pressure, or alternatives such as resin laminates, conforming to requirements of 16 CFR 1201 and ASTM C1172. Color shall be clear.
 - 2. Operating mechanisms, parts, and equipment in operable windows shall have a history of reliability and readily available replacement parts. Inward operating casement units have performed well on similar projects.
 - 3. Air Infiltration - ASTM E 283, shall not exceed 0.06 cfm per square meter of fixed area at test pressure of 58.6 kg/sq m
 - 4. Water Infiltration - ASTM E 331, no water penetration at a test pressure of 73.2 kg/sq m.
 - 5. Structural Performance - Full recovery of glazing materials at 160.9 km/h wind velocity. Windows shall be designed for wind loads in accordance with IBC.
 - 6. Security - Windows shall offer substantial resistance to unauthorized entry, equal in resistance to the adjoining wall.
 - 7. Fire Protection - Where required by code, fire windows, frames, and hardware shall be either tested and listed by UL or similar nationally accredited testing laboratories or

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- approved authorities. Such fire windows shall be installed with label attached in accordance with NFPA 80.
8. Thermal Performance - ASTM C 236, minimum u -value of 0.65 and a minimum crf of 67. Thermal break fixed or casement frames, meeting a design STC of 50 per ASTM E 90 and a field test STC 39 per ASTM E 336.
 9. Insulating glass units per ASTM E 774 and E 773.
 - a) Transmittance - 42 percent
 - b) U -value - 0.29 winter; 0.30 summer
 - c) Shading coefficient - 0.30
 - d) Reflective Heat Gain - 64
 - e) Light Reflectance - 10 percent.
 10. Safety Glass where required by IBC 2000 and AFMAN 91-201, Section 4.31. Operable outside windows shall have guards conforming to NFPA 101, Chapter 5, ANSI Z 97.1, and ASTM C 1172
 11. Float glass - ASTM C 1036
 12. Expansion/Contraction - System components must comply with cycling temperature range of 77°C over a 12 hour period without causing detrimental effects to system components, anchorages, and other building elements.
 13. Maintain air barrier and vapor seal throughout the window assembly; 40 percent rh without seal failure at interior atmospheric pressure of 25.4 mm sp 22°C.
 14. Glazing compound: Sealant per ASTM C 920, Grade NS, Class 25, Use G, A and O.
- B. Insulated Steel Sectional Overhead Door - Capable of withstanding the effects of design loads without permanent deformation; wind load resistance meets ANSI/DASMA 102-1996 for project conditions.
1. Performance criteria based on Overhead Door Corporation "Thermacore" 595 Series and Model SEL+ continuous duty motor. Proposed substitutions must meet these minimum criteria.
 2. Sectional door assembly - Metal/foam/metal sandwich panel construction with EPDM thermal break and ship-lap design with rounded water channels. Doors shall have the following characteristics:
 - a) Panel Thickness - 41 mm
 - b) Exterior Surface - Flush textured
 - c) Exterior Steel - 20 gauge, hot-dipped galvanized
 - d) End Stiles - 16 gauge
 - e) Standard Springs - High cycles
 - f) Insulation - CFC-free and HCFC-free polyurethane, fully encapsulated
 - g) Thermal Values - R -value 14.86; U -value of 0.067
 - h) Air Infiltration - 0.08 cfm at 24.1 kilometers per hour; .013 cfm at 40.2 kilometers per hour
 - i) Sound Transmission - Class 26
 - j) Partial Glazing - Window and door openings protected by 6 mm laminated glass, steel reinforced aluminum frames, appropriate hardware to resist 0.07 kg/sq cm force applied to the glazing surface, and frame attachment to the exterior wall to resist 14.4 kg/sq cm tension force and 5.3 kg/sq cm shear force.
 - k) Finish and Color - 2-coat baked-on polyester, color per Eielson AFB standards.
 - l) Windload Design - ANSI/NAGDM 102 standards and as required by code.
 - m) Hardware - Galvanized steel hinges and fixtures; ball bearing rollers with hardened steel braces.
 - n) Lock - Interior mounted slide lock
 - o) Weatherstripping - EPDM rubber tube seals fitted inside joints between sections; header seal and jamb weather stripping
 - p) Electric Motor Operation - UL listed electric operator for size and type not less than 203.2 mm or more than 304.8 mm per second.
 - q) Entrapment Protection - Pneumatic sensing edge

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- C. Exterior Man-Door
1. ANSI A151.1 and ANSI A224.1 maximum deflection with 20.4 kg pressure shall not exceed 14.3 mm.
 2. Extra-heavy duty, SDI Grade III, Model 2, thermally insulated to an overall R value of 10, measure in accordance with ASTM C 236. Insulated steel door systems shall comply with ISDSI 102, meeting the following characteristics:
 - a) Exterior doors and frames shall be galvanized and factory primed to receive field finish
 - b) Install doors and frames per SDOI guidelines and manufacturer's written instructions.
 - c) Steel meets ANSI A 250.8 standards
 - d) Minimum 6 mm glazing where applicable.
 3. Weather-stripping for head and jamb protection shall be elastomeric type of synthetic rubber or neoprene suitable for door and frame types and sub-arctic conditions. Use bottom sweep weather-stripping, 3.2 mm neoprene or spring.
- D. Interior Doors – Solid core wood doors
1. Comply with AWI "Architectural Woodwork Quality Standards Illustrated".
 2. Lifetime warranty of manufacturers standard form and within tolerances of less than 6.35 mm in a 1066.8 mm x 2133.6 mm door section
 3. Doors for Transparent Finish:
 - a) Grade: Custom, grade A faces.
 - b) Species and Cut, red oak, plain sliced.
 - c) Pair and set match: provide for double doors.
 4. Solid-core doors with Particle board cores
 - a) Comply with ANSI A208.1, Grade LD-1.
 - b) Wood Blocking as follows: 127 mm top rail blocking for doors with closers; 127 mm bottom rail blocking in doors indicated to receive kick, mop, or armor plates; 127 mm midrail blocking indoors indicated to have exit devices.
 5. Fire-rated Doors
 - a) Mineral-core construction as needed to achieve fire rating indicated.
 - b) Composite blocking for mineral-core doors with improved screw-holding capacity for wood blocking configuration similar to standard solid-core doors above.
 - c) Edge construction: laminated edge construction with improved screw-holding capability and split resistance and outer stile matching face veneer.
- E. Hardware - Conform to ANSI/BHMA, and integrate project into existing base security system. Hardware shall be compliant with NFPA 101 and referenced accessibility standards. Provide heavy-duty builders hardware with features inaccessible to tampering, hinges at exterior side of doors shall be pinned, set screw, or welded so they cannot be removed. Exterior door handles must be operable with a heavy-gloved hand. Hardware components at exterior doors shall be non-ferrous and suitable for sub-arctic conditions.
1. Automatic Door Closers – doors part of fire rated assembly and exterior swinging doors shall have closers of parallel arm type with cold-weather or all-weather fluid.
 2. Door locksets shall be "Best" brand, or shall meet or exceed "Best" performance requirements with cast levers and escutcheons, and shall accept "Best" cylinders.. Cylinders are 7-pin tumbler type constructed from brass or bronze, stainless steel or nickel silver; mortise type threaded cylinders with rings and straight or clover type cam.
 3. Cores are required to be "Best" brand, no substitutions. Interchangeable cores shall match finish of lockset.
 4. Emergency exit-only doors (if applicable) shall have no exterior hardware, deadlocking panic hardware only on interior side, except doors from Maintenance Bay to exterior near exterior accesses to building utility spaces (i.e. Compressor, Boiler Room, Generator).
 5. Kickplates are 1.3 mm stainless steel, beveled at top and two sides.

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6. Wall stops or overhead stops are required throughout, floor stops should be avoided.
7. All fire-rated doors shall have smoke gaskets.
8. Doors required to be self-closing shall have door closers as covered by BHMA A156.4; spring hinges are not acceptable.
9. Exit devices shall be used where required by NFPA 101.
10. Coordinate keying system and number of keys needed with the Government.
11. Door silencers shall be used at all doors except those in gasketed frames.
12. Weather stripping for head and jamb protection shall be elastomeric type of synthetic rubber or neoprene suitable for door and frame types. Use bottom sweep weatherstripping, 3.2 mm thick neoprene or spring tension type of bronze or corrosion resisting steel on an extruded aluminum or bronze bar.
 - a) Head and jamb weatherstripping and door-bottom weatherstripping shall form a continuous barrier to infiltration; exterior double-doors shall have astragal weather stripping.

F. Access Doors

1. Placement of panels and orientation of fixtures shall be coordinated so as to minimize visual impact while providing adequate access to equipment being serviced.
2. Fabricate frames and flanges of 16 gauge steel and door panels of 14 gauge steel, galvanized where exposed to corrosive environment; UL listed products in rated ceilings and partitions in accordance with NFPA 80-99, NFPA 252-99, and UL 10B-97.
3. Size access panels so that two-handed work can be easily accomplished. See 2.6 Mechanical Design Criteria for access requirements.

G. Armory Vaults, Armory Vaults' Doors/Frames and Door Locks/Hasps - Refer to AA-D-600D for door, door frame and door hardware requirements.**1. Armory Vaults**

- a) Walls – Minimum 200 mm reinforced concrete, CMU or interlocking brick per MIL-HDBK-1013/1A Table 14.
- b) Floors – Minimum 150mm concrete reinforced with 150mm x 150mm W4 by W4 mesh or equal bars per MIL-HDBK-1013/1A Table 14.
- c) Roof/ceiling – Reinforcing bar spacing will form a grid using 12.7mm (No. 4) or larger so that the area of any opening does not exceed 0.6 square meters. If ceiling or roof is of concrete panjoist construction, the thinnest may not be less than 150mm and the clear spaces between joists may not exceed 500mm per MIL-HDBK-1013/1A Table 14.
- d) Door/frame – GSA Class 5 per Fed Spec AA-D-00600C per MIL-HDBK-1013/1A Table 14.
- e) Locks/hasp – High security lock (MIL-P-43607) and high security hasp (MIL-P-29181) per MIL-HDBK-1013/1A Table 14.

H. Munitions Storage Room, Munitions Storage Room Door/Frame and Door Locks/Hasps.

1. The Munitions Storage Room located in the AD Armory Vault shall be designed to store Category II, III and IV munitions per Appendix 1 of DoD 5100.76-M. The structural design of the Munitions Storage Room shall be designed per Table 14 of MIL-HDBK 1013/1A. Door shall be solid core wood with keyed lockset.

I. Bullet-Resistant Windows – Bullet-resisting glazing materials may be glass, plastic, or composite of the two. Window assemblies shall be fabricated from bullet-resistant steel shapes or hollow metal with internal armoring and bullet-resistant glazing materials. The entire assembly shall meet or exceed the specified regulatory requirements to meet level 3 per UL 752, Bullet Resisting Equipment. Frames shall be welded units with minimum frame face dimensions of 50 mm. Glazing material shall be furnished with window assembly for on-site installation, or windows shall be factory glazed units. Entire assembly shall be furnished by same manufacturer. Exterior (attack side) glazing stops shall be welded or integral to frame.

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Interior (protected side) glazing stops shall be removable stops attached with high-strength alloy steel machine screws with tamper-resistant heads.

- J. Bullet-Resistant Pass-Through Drawer – Pass-through drawer shall be fabricated from bullet-resistant steel shapes and the entire assembly shall meet or exceed the specified regulatory requirements. Pass-through drawer shall be designed to prohibit forcible entry or direct aim by the insertion of the muzzle of a firearm from exterior side when drawer is in the open position. Attachment to wall assembly shall be in accordance with manufacturer's recommendations. All aspects of the assembly, including hardware and method of anchorage to wall, shall be included in the labeling or test certification.
- 2.4.9 Exterior Signage - Signage shall meet Eielson Air Force Base signage standards. Signage shall be integrated into the building and site design in an attractive manner. Building signage must be easily covered at higher threat cons.
- 2.4.10 Exterior Deck Construction - No exterior deck construction is provided in this contract.
- 2.4.11 Sealants and Caulking
 - A. At exterior windows and doors, wall louvers, roof vents and other miscellaneous penetrations through the exterior envelope, flashings, backer rods, sealants, and caulks shall be provided which properly contain irregular forms, recesses, and grooves to insure a weather tight seal. Sealants shall be either concealed from UV exposure or of the type not susceptible to UV degradation.
 - B. All sealants shall be chemically formulated for the material substrate, joint movement, and environmental exposure. Color shall be properly coordinated with the adjacent materials.
- 2.4.12 Paint and Coatings - Reference Sherwin Williams products and application recommendations, or equal product of another manufacturer. Paint all exposed wood surfaces. Provide factory finish on all other surfaces, including rain hoods, pipes penetrating the exterior wall, alarm bells and horns, metal trim/flashings. Masonry will have integral color.
 - A. Exterior Paint
 - 1. Metal Surfaces – Steel
 - a) Coating Vehicle – acrylic latex
 - b) Coating Finish – primer
 - c) Surface Preparation – SSPC-SP2
 - d) Primer - 1 coat All Surface Enamel Latex Primer (A41)
 - e) Coating Vehicle - acrylic latex
 - f) Coating Finish – satin
 - g) Topcoat - 2 coats A-100 Exterior Latex Satin (A82)
- 2.4.13 Mail boxes are not provided in this contract.
- 2.4.14 Interior Construction
 - A. Interior Partitions
 - 1. Fire Walls, Fire Barriers, Fire Partitions, Incidental Use Areas, and Corridors shall be designed and constructed to fire ratings defined by code, and to acoustical requirements defined by area in the Room Criteria Sheets. Industry standards for fire ratings, structural requirements, application, and finishing shall be in accordance with Gypsum Association and Underwriters Laboratory.
 - 2. Acoustical Walls

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- a) Sound rated walls must be full height and have the entire perimeter and all penetrations (conduit, junction boxes, telephone outlets, etc.) caulked airtight using acoustical sealant.
 - b) Corridor walls should be full height at key offices (such as Commander's Office) and Conference Rooms. For standard offices, hallway walls can be ceiling height to allow for return air and cabling access.
 - c) Where sound rated walls are required, doors must also be gasketed. Use solid core wood doors. Gasket the doors using Pemko S-88 or similar at heads and jambs. Door bottoms must be gasketed using Pemko type 315 or similar. It is important that door bottom seals contact a hard surface, not carpet for acceptable results.
3. Minimum requirements for interior walls are as follows:
- a) Non-Bearing Partitions – 92 mm metal studs @ 400 mm o.c. with 1 layer 16 mm type 'x' gypsum wall board each side.
 - b) Moisture resistant gypsum wall board shall be used in damp area walls, complying with ASTM C630.
 - c) Cementitious tile backer board at shower areas
 - d) Light orange peel texture for painted gypsum wallboard finish
 - e) Metal studs and screws shall be spaced to meet UL requirements for the required fire resistance and structural requirements. Allowable deflection is L/240.
- B. Shower Enclosures
- 1. Shower Pan - Ceramic wall tile with cementitious tile backer board substrate. Surround shall be 1900 mm high. Alternate solution is one-piece FMC-2000 fiberglass molding compound with slip resistant surface and a ribbed bottom for strength and durability by Swan Corporation or equal product by another manufacturer.
 - a) Impact Resistance: NEMA LD3
 - b) Stain Resistance: Passes, ANSI-Z124.35.2
 - c) Cigarette Resistance, No lasting effect, NEMA LQ1
 - d) Boiling Water Resistance, No effect, NEMA LD3
 - e) High Temperature Resistance, No effect, NEMA LD3
 - f) Abrasion Resistance, Passes, ANSI-Z124.3
 - g) Color Stability, No change, NEMA LD3
 - h) Thermal Conductivity, No effect, NEMA LD3-3.08
 - i) Hardness, 115 Rockwell R Scale, 50 Barcol, ASTM D-785
 - j) Bacterial Resistance, No Growth, ASTM G-22
 - k) Wear and Cleanability, Pass, ANSI Z124.35.3
 - l) Thermal Expansion, 1.64×10^{-5} in/in/F°, ASTM D-696
 - m) Water Absorption, .033, ASTM D-570
 - n) Radiant Panel Flame Spread, 15, ASTM E84
 - o) Smoke Developed Index, 255, Fire Rating, Class I,
 - 2. Shower Surround - Ceramic wall tile with cementitious tile backer board substrate. Surround shall be 1900 mm. Alternative solution is solid plastic polymer resin – high density polyethylene (HDPE) with homogenous color throughout, eased edges with moisture resistant gypsum wall board substrate.
 - a) Installation: install partitions secure, plumb, and level in accordance with manufacturers' instructions.
 - 3. ADAAG and UFAS compliant shower stall: One-piece seamless fiberglass (FRP) shower module, 914.4 mm x 914.4 mm nominal inside dimensions. Brushed stainless steel grab bars, left or right-hand fold up seat, adjustable showerhead with anchor plate, hand shower with flexible hose, wall connections and flange.
- C. Lockers - Active Duty, double tier, 609.6 mm wide x 914.4 mm deep x 914.4 mm high, Air National Guard, single tier, 609.6 mm wide x 914.4 mm deep x 1524 mm high; all seams and joints welded, 14 gauge door, 16 gauge frame, 16 gauge body parts with 18 gauge backs, one

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piece door w/ louvers and full loop type hinges, all metal locking system for padlocks (padlocks are GFGI), recessed handle, baked on enamel finish and number plate. Provide one hat shelf and 3 single prong hooks.

1. Acceptable Manufacturers
 - a) Republic
 - b) DeBourgh
 - c) Lyon.

D. Janitor, Locker Room, and Toilet Accessories - All products shall meet all referenced accessibility standards.

1. All accessories shall be satin finish stainless steel except where noted. Accessories shall be mounted in conformance with ADAAG 4.16, 4.17, 4.18, 4.19, and 4.22. Accessories shall be either recessed or semi-recessed as noted. Semi-recessed accessories shall protrude no more than 100mm from the adjacent wall.
2. Coat Hooks – heavy duty: Bobrick Model B-682 or equal.
3. Grab Bars – installed to be capable of withstanding a 1200 kg vertical load without coming loose from the fastenings and without obvious permanent deformation; 31.8 mm diameter stainless steel heavy-duty bar with concealed fasteners and safety grip: Bobrick Model B-550; Bradley model 832 or equal.
4. Mirror – No.1 quality 6 mm select float glass mirror in heavy-gauge stainless steel frame, 61 mm x 91 mm mirror, guaranteed 15 years against silver spoilage: Bobrick Model B-290 2436; Bradley Model 780-2436 or equal.
5. Combination Paper Towel Dispenser/Waste Receptacle – constructed of not less than .8 mm (22 gauge) satin finish stainless steel, recessed mounted, 41.6-45.4 liter waste receptacle: Bobrick Model B-39007; Bradley Model 2038 or equal. Coordinate type of paper towel type with facility standard.
6. Paper Towel Dispenser for Janitor Closet – multi-purpose surface mounted stain stainless steel unit, capacity for 400 C-fold for 525 multifold paper towels: Bobrick Model B-262; Bradley model 250-15 or equal. Coordinate type of paper towel type with facility standard.
7. Sanitary Napkin and Tampon Vendor – recessed satin stainless steel unit with free no-coin operation: Bobrick Model B-3500C; Bradley Model 4017-40 or equal.
8. Shower Curtain Rod – provide a heavy-duty satin stainless steel rod in length appropriate for design and tub enclosure, 25.4 mm diameter: Bobrick Model B-207; Bradley Model 9538 or equal.
9. Soap Dispenser – bright stainless steel liquid dispensing unit with 6" spout, for countertop mount, with below-counter shatter-resistant polyethylene vertical tank, 1 liter holding capacity: Bobrick Model B-8226; Bradley Model 6326 or equal.
10. Toilet Tissue Dispenser – provide a recessed satin stainless steel combination double roll toilet tissue dispenser/sanitary napkin disposal receptacle unit: Bobrick Model B-3094; Bradley Model 594 or equal. Provide stock of 50 disposable liners with receptacle.

E. Horizontal Louvered Blinds shall comply with AWCMA Document 1029 as self-leveling, consisting of louver slats, rails, ladders, tapes, lifting/tilting mechanisms, cord/cord-lock, tilt control, and installation hardware.

F. Interior Signage shall meet Eielson Air Force Base Installation Design Guide. Signage shall be integrated into the building design in an attractive manner. Interior signage shall identify all spaces and life safety elements in the building. Conform to ADAAG and UFAS standards.

G. Utility Stair – 1067 mm wide steel stair with open risers and treads in open grate material. All railings, guards and treads to be welded. Stairs shall be designed and fabricated to carry a uniform live load of 7 kg/sq cm or a concentrated load of 21.1 kg/sq cm at the center of any tread. Handrails shall not be less than 864 mm or more than 965 mm when measured vertically from the tread nose to the top surface of the rail. When used as guardrails, the top

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surface shall not be less than 1067 mm. Structural steel construction to meet or exceed the requirements of AISC. ASTM A36 and A500 structural steel.

- H. Fire Extinguishers - Provide extinguishers and cabinets in size, quantity, and type to match occupancy, and as follows:
 - 1. Administrative and public areas extinguishers shall be semi-recessed cabinet type.
 - 2. All other areas fire extinguishers shall be surface-mounted.
- I. Countertops, Cabinets, and Shelving - Sturdy hardware and built according to "Premium grade" standards of the "Architectural Woodwork Quality Standards 7th Edition Version 1.2 1999."
 - 1. Extend wall cabinets to finish ceiling, without enclosed soffits, for additional storage capacity.
 - 2. Miscellaneous shelving to be constructed of 19mm particle board with melamine finish, and shall be supported by adjustable double slot heavy duty steel brackets on wall standards. Use matching PVC edge banding on all edges. Brackets are mounted 762 mm on center, maximum.
 - 3. Casework joints, connections, hardware and finish shall be constructed to withstand high abuse.
 - 4. Countertops shall be scribed to fit opening and constructed of high-pressure solid surface. Backsplashes, countertops, and edges shall be one-piece construction. Waterfall or bullnose countertop edges are preferred.
 - 5. Hanging closet rods shall be heavy duty extruded aluminum or stainless steel, load capacity of 50 kg.
 - 6. Minimum clearance between adjacent countertops shall be 1200 mm.
- J. Concealed Motorized Projection Screen – Provide front-projection screens manufactured from mildew- and flame-resistant fabric with glass-beaded viewing surface.
 - 1. The material shall be seamless woven-cloth proprietary fabric with a glass-fiber base, flame resistance per NFPA 701, with seamless construction and black masking border edge treatment. See Room Criteria Sheets for screen sizes.
 - 2. Provide manufacturer's standard spring-roller operated units designed and fabricated for wall or ceiling installation and consisting of case, screen, mounting accessories, motors, switches, and other components necessary for a complete installation.
- K. Dry Erase Board (white) – Balanced, high-pressure-laminated, porcelain enamel markerboards of 3-ply construction consisting of face sheet, core material, and backing.
 - 1. Face Sheet - 0.61mm enameling grade steel especially processed for temperatures used in coating porcelain on steel. Coat exposed face and edges with a 3-coat process consisting of primer, ground coat, and color cover coat. Coat concealed face with a 2-coat process consisting of primer and ground coat. Fuse cover and ground coats to steel at manufacturer's standard firing temperatures, but not less than 649°C or 0.61mm, "Vitracite", porcelain enamel clad, Type 1, stretcher-leveled aluminized-steel face sheet, as manufactured by Claridge Products and Equipment. Fuse porcelain enamel coating to steel at approximately 538°C.
 - a) Cover Coat: Provide manufacturer's standard, light-colored, special writing surface with gloss finish intended for use with erasable dry markers.
 - 2. Core - 9.5 mm thick, particleboard core material complying with requirements of ANSI A208.1, Grade 1-M-1.
 - 3. Backing Sheet - 0.38 mm thick, aluminum-sheet backing.
- L. Metal Trim and Accessories - Fabricate frames and trim of not less than 1.6 mm thick, extruded-aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight single-length units. Keep joints to a minimum. Miter corners to a neat, hairline closure.
 - 1. Field-Applied Trim - Manufacturer's standard snap-on trim with no visible screws or exposed joints.

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2. Chalk tray - At each and every marker board unit provide manufacturer's standard, continuous, solid, extrusion-type aluminum chalk tray with ribbed section and smoothly curved exposed ends for each markerboard.
 3. Map Rail - Provide map rail at top of each and every unit, complete with the following accessories:
 - a) Display Rail - Provide continuous cork display rail approximately 25.4 or 50.8 mm wide, as indicated, integral with map rail.
 - b) End Stops - Provide one end stop at each end of map rail.
 - c) Map Hooks - Provide 2 map hooks for every 1219.2 mm of map rail or fraction thereof.
- M. Stainless Steel Counter - Stainless steel shall conform to American Society for Testing and Materials (ASTM) specification A240, Type 304 Condition A, 18-8, having a No. 4 finish. A No. 2B finish shall be acceptable on surfaces of equipment not exposed to view. Sheets shall be uniform throughout in color, finish and appearance. Stainless steel tubing pipe shall be Type 304, 18-8, having a No. 4 finish, and shall conform to either ASTM A213 if seamless or ASTM A249 if welded.
- 2.4.15 Interior Finishes – materials and installation methods shall conform to manufacturer standards and recommendations for high-abuse applications.
- A. Wall Base
1. Rubber – 100 mm-rubber cove conforming to ASTM F 1861, Type TS, Group 1, Styles A and R; top set straight and coved, 101.6 mm high. Vinyl base is prohibited. Color match rubber base to transition strips. Do not install rubber resilient base in conjunction with ceramic, quarry or other similar hard tile surfaces.
 2. Stainless Steel – type 304 sheet per ASTM A666, type 304 with #4 finish, not less than 16 gauge.
- B. Vinyl Composition Tile – installed on prepared substrates per industry best practices, in conformance to the following:
1. Static Load Limit - 8.8 kg/sq cm
 2. ASTM F 1303; Type II, Grade I, Class A
 3. Critical Radiant Flux - ASTM E 648 – Pass
 4. NBS Smoke - ASTM E 662, 450 or less
 5. Meet ADAAG for static coefficient of friction
 6. Installation per RFCI Recommended Work Procedures for Resilient Floor Covering
- C. Resilient Sheet Flooring – Linoleum Flooring
1. Nominal overall thickness 2.5 mm
 2. Static Load Limit - 17.6 kg/sq cm
 3. Fire Safety - ASTM F 970
 4. Critical Radiant Flux - ASTM E 648 - 0.45 watts/cm², class 1
 5. Smoke: ASTM E 662 - 450 or less
 6. Installation per RFCI Recommended Work Procedures for Resilient Floor Covering
- D. Resilient Sheet Flooring – High-use areas; see Room Criteria Sheets for locations. Altro Flooring “Designer 25”, or equal per ASTM F1303 with self-cove base and aluminum cap trim. Substitutions shall meet the following performance criteria and chemical resistance to this product.
1. Thickness – 2.5 mm
 2. Width – 2.0 m
 3. Weight – 3.2 kg/sq m
 4. Slip Resistance (Dry) – 0.89, compliance with ADAAG A4.5.
 5. Seam – vinyl heat welding thread

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6. Hygiene – containing bacteriostat providing resistance against gram positive and gram negative microorganisms, and protection against fungal activity.
 7. Indentation Resistance – per ASTM F1303.
 8. Water Absorption – average 1.07% when tested per DOT, 1950.
 9. Wear Resistance – compliance with ASTM C501.
- E. Ceramic Floor Tile – unglazed ceramic tile with low absorption rate is preferred. Tile shall be standard grade conforming to ANSI A137.1.
1. Tile shall be impact resistant with a minimum breaking strength of 113 kg for floor tile in accordance with ASTM C 648.
 2. Tile for cold climate projects shall be rated frost resistant by the manufacturer as determined by ASTM C 1026.
 3. Water absorption shall be in accordance with ASTM C 373.
 4. Tile shall have a minimum coefficient of friction in accordance with ASTM C 1028.
 5. Tile shall be Class IV Plus-Extra Heavy Traffic, durability classification as rated by the manufacturer when tested in accordance with ASTM C 1027 for abrasion resistance as related to foot traffic.
- F. Ceramic Wall Tile – glazed wall tile by Dal-Tile, American Olean, or equal. Cementitious tile backer board is required substrate in showers per TCA system W244. Moisture resistant gypsum wall board is required in all Restrooms, Janitorial Rooms and Locker Rooms.
1. Coefficient of Friction:
 - a) Wet - <0.50
 - b) Dry - >0.90
 2. Moisture Absorption - 11-16%
 3. Breaking Strength - 45 kg – 104 kg
- G. Carpet – shall be stain resistant and provide for easy cleanability, of sufficient weight and density to resist high traffic commercial use. Comply with Air Force ETL-00-6 carpet standard.
1. CRI Carpet Specifiers Handbook and CRI Standard for Installation of Textile Floor Covering Materials.
 2. Minimum Density - 6000
 3. Tuft Bind - minimum 89 newtons (20#)
 4. Flame spread no greater than 75 when tested in accordance with ASTM E 84.
 5. Flame propagation index less than 4.0 when tested in accordance with UL 992.
 6. Critical Radiant Flux shall be 0.45 watt per square centimeter when tested in accordance with ASTM E 648.
 7. Flooring Radiant Panel – ASTM E 648, direct glue down, Class 1.
 8. Static Propensity - AATCC 134, 3.0 kv or less.
 9. Install using sound industry practices for seam placement, surface preparation, pile direction, seam treatment, scribing, etc.
 10. Pattern shall be multi-color, tweed.
- H. Walk-off Mat – heavy duty extruded aluminum strips with fusion bonded scrubber insert strips, surface mounted application with heavy gage vinyl support cushions interlocked with aluminum strips. Utility entrances shall have extruded steel grating in front of doors. Recessed galvanized pan (without drain) shall extend the full length of enclosure in the direction of traffic.
- I. Rubber Floor Tile shall be suitable for areas of heavy foot traffic, extremely resistant to abrasion, wear, impacts, acids and mild alkaline chemical spills. The product shall be slip-resistant, bendable, crack-resistant, anti-static, flame retardant and oil-resistant.
- J. Raised Floor System – Raised floor systems include floor panels, pedestals and items such as stringers, steps, ramps, closures and trim.

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1. Raised floor systems must be designed to accommodate static, rolling and impact loading.
 2. The designer is responsible for identifying and defining requirements for the floors. Drawings will indicate location and limits of raised floor systems, finish floor elevation, stair and/or ramp information such as tread width and riser height for stairs and width slope and length of ramps, connection to ground, and any other information required to indicate the extent of work required. See Appendix 11 for additional information.
- K. Concrete Slab Finishes
1. Utility areas not receiving finish flooring; see Room Criteria Sheets for locations – system descriptions are based on Sherwin Williams products and application recommendations; equal product of another manufacturer is acceptable
 - a) Coating Vehicle – moisture cured urethane
 - b) Coating Finish – gloss
 - c) Surface Preparation – SSPC-SP13 NACE 6
 - d) Topcoat - 2 coats ArmorSeal Rextthane I Floor Coating with slip-resistant additive.
 2. Epoxy Floor Paint at Mobility Bays and Parking Garage; acceptable manufacturer products with recommended application methods:
 - a) Garon Products – Stop-Slip HD heavy traffic anti-slip coating
 - b) Duraflex, Inc. – Dur-A-Gard Coating Vehicle – moisture cured urethane; primer – “Duraglaze Tie-Coat”; base coating – “Dur-a-Gard”, 2 coats; top coating – “Poly-Thane 3”, 2 coats; in light color with slip-resistant additive.
- L. Interior Paint – reference Sherwin Williams products and application recommendations, or equal product of another manufacturer. Use lightest colors practical for maximum light distribution.
1. Exposed non-structural steel
 - a) Coating Vehicle – acrylic
 - b) Coating Finish – primer/finish
 - c) Surface Preparation – SSPC-SP2
 - d) 1 Coat Kem Kromik Universal Metal Primer
 - e) 2 Coats Industrial Enamel
 2. Gypsum Wall Board Surfaces
 - a) Coating Vehicle – latex
 - b) Coating Finish– primer
 - c) Surface Preparation – S-W8
 - d) Primer - 1 coat PrepRite 200 Interior Latex Primer (B28W200)
 - e) Coating Vehicle – latex
 - f) Coating Finish – satin
 - g) Topcoat - 2 coats ProClassic Waterborne Acrylic Satin, (B20)
 3. Masonry Wall Surfaces - CMU, Concrete for standard-duty areas
 - a) Coating Vehicle – latex
 - b) Coating Finish – primer
 - c) Surface Preparation – S-W3,5
 - d) Primer - 1 coat PrepRite Masonry Primer (B28W300)
 - e) Coating Vehicle – latex
 - f) Coating Finish – satin
 - g) Topcoat - 2 coats ProClassic Waterborne Acrylic Satin (B70)
 4. Masonry Wall Surfaces – CMU, at Parking Garage (Wash Rack)
 - a) Dur-A-Wall FGR epoxy wall system consisting of Dur-A-Gard No-Sag with fiberglass reinforcement designed especially for wall applications, or equal-performing product by another manufacturer.
 5. Steel – Galvanized
 - a) Coating Vehicle – acrylic
 - b) Coating Finish – primer

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- c) Surface Preparation – SSPC-SP2, SP3
- d) Topcoat - 1 coat DTM Acrylic Primer/Finish (B66W1)
- e) Coating Vehicle – acrylic
- f) Coating Finish – semi-gloss
- g) Topcoat - 2 coats DTM Acrylic Coating

M. Suspended Acoustical Panel Ceiling – Materials

- 1. Grid
 - a) Exposed tee.
 - b) Classification - Heavy-Duty
 - c) Main Beam Load - 1220 mm hangar spacing, minimum 23.8 kg/m
 - d) Cross Tee Load - 1220 mm length, minimum 20.6 kg/m
 - e) Seismic Performance - Classified for zone 4.
 - f) Fire Resistance - Install per UL fire resistive design where required to meet hourly rating.
- 2. Acoustical Panels - Suspended fiberglass tile (such as Armstrong Stonebrooke or Nubby) in a 610 mm x 1220 mm grid.
 - a) Classification - ASTM E 1264; Type 111, Form 2, Pattern CDK
 - b) Light Reflectance - Minimum 0.81
 - c) Size – 610 mm x 610 mm
 - d) NRC - minimum 0.50.
 - e) CAC - minimum 35.
 - f) Surface Burning Characteristics - ASTM E 1264; Class A, Flame Spread 25 or under.
 - g) Acoustical ceilings shall comply with CISCA - Acoustical Ceilings Use and Practice.
 - h) Installation - Install grid and panel per manufacturer's written Instructions and best industry practices.
 - i) Warranty - Provide one-year warranty against sagging and warping of panels.

2.4.16 D/B Contractor Innovations - All D/B contractor innovations shall conform to the performance criteria outlined in this section.

2.4.17 Prohibited Items**A. Items which do not meet the minimum requirements listed are not allowed. The following are prohibited for this project:**

- 1. Vinyl wall base.
- 2. PVC Roofing.
- 3. Flammable wainscot in Mobility Bays and Parking Garage.
- 4. Roof gutters and downspouts.
- 5. No wood in permanent construction systems including roof and wall assemblies.
- 6. FRT plywood in any part of the roofing system - FRT may only be used in non-structural applications that are not subject to elevated temperatures or high humidity.
- 7. Exposed structural steel – All structural steel shall be concealed in architectural finishes. Bracing shall be concealed in the vertical plane of walls. Boxing of individual braces is not allowed.

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.5 STRUCTURAL DESIGN CRITERIA****2.5.1 References**

- A. Structural design and design documents shall be in accordance with the following codes and regulations, and shall conform to the standards recognized by the codes and regulations. If dates are not given for reference standards or criteria, the latest edition is to be used. Where reference is specifically made from this narrative to other sections of the overall "Request for Proposal" document or from other sections to this section, the criteria stated here in this section shall govern. Specific design loads, the materials, the strength and quality of the materials indicated here in shall be considered minimums. If design loads, material(s) or materials(s) as components of a system are not specifically prohibited from the project and they meet the requirements of the specified codes, they may be included in the project. Structural design shall be provided for elements that are not part of the structural system, but provide support for other facility system(s).
1. American Association of State Highway and Transportation Officials (AASHTO)
 2. American Concrete Institute (ACI):
 - a) ACI 318 Building Code Requirements for Structural Concrete and Commentary,
 - b) ACI 315 Manual of Standard Practice for Detailing Reinforced Concrete Structures, ACI Manual of Concrete Practice, Part 1 through Part 5,
 - c) ACI 530 Building Code Requirements for Masonry Structures
 3. American Institute of Steel Construction (AISC):
 - a) AISC ASD 9th Ed., Allowable Stress Design, Manual of Steel Construction,
 - b) AISC LRFD 2nd Ed., Load & Resistance Factor Design Specification for Structural Steel Buildings and Manual of Steel Construction,
 - c) AISC Pub No. S341 (1997) Seismic Provisions for Structural Steel Buildings,
 - d) AISC Pub No. S341s (1999) Seismic Provisions for Structural Steel Buildings, Supplement No. 1
 4. American Iron and Steel Institute (AISI):
 - a) AISI Cold Formed Steel Design Manual
 5. American Welding Society (AWS):
 - a) AWS D1.1, Structural Welding Code – Steel
 6. American National Standards Institute/American Society of Civil Engineers (ANSI/ASCE):
 - a) ASCE 7 Minimum Design Loads for Buildings and Other Structures
 7. Federal Emergency Management Agency, National Earthquake Hazards Reduction Program (FEMA):
 - a) FEMA 302 (1997 edition) NEHRP Recommended Provisions for Seismic Regulations for New Buildings, Part 1 – Provisions,
 - b) FEMA 303 (1997 edition) NEHRP Recommended Provisions for Seismic Regulations for New Buildings, Part 2 – Commentary
 8. Masonry Institute of America Publications
 9. Materials Handling Industry of America (MHIA)
 10. National Concrete Masonry Association Publications
 11. Steel Deck Institute (SDI), Design Manual and Diaphragm Design Manual
 12. Steel Joist Institute (SJI), Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders
 13. Unified Facilities Criteria (UFC)
 - a) UFC 1-200-01 Design: General Building Requirements
 - b) UFC 4-100-01 DoD Minimum Antiterrorism Standards for Buildings
 14. Military Design Manuals (DM), Technical Instructions (TI), Engineering Instructions (EI), Technical Letters (TL) and Technical Manuals (TM):

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- a) TI 800-01 Design Criteria,
- b) TI 809-01 Load Assumptions for Buildings
- c) TI 809-02 Structural Design Criteria for Buildings
- d) TI 809-04 Seismic Design for Buildings
- e) TI 809-06 Masonry Design for Buildings
- f) TI 809-26 Welding Guidance for Buildings
- g) TI 809-27 Concrete Floor Slabs on Grade Subject to Heavy Loads
- h) TI 809-29 Structural Considerations for Metal Roofing
- i) TI 809-30 Metal Building Systems
- j) TI 809-52 Commentary on Snow Loads
- k) MIL-HDBK-1013/1A Design Guidelines for Physical Security of Fixed Land-Based Facilities

2.5.2 Designer Responsibility

- A. The Design-Build contractor's Structural Engineer of Record shall be responsible for the design of the complete structural system for the buildings. Complete structural system for the buildings shall include foundations, walls, roof framing, floor and roof diaphragms, lateral load stability, framing and connection of any architectural features, and support and bracing of mechanical and electrical related structures, although they may be shown on other disciplines' drawings. The structural engineer is also responsible for the design of all lesser structures. Related structural design shall be compatible with the architectural design. The structural design drawings and calculations shall be sealed and signed by the engineer in responsible charge. The engineer shall be licensed as a civil engineer in the State of Alaska.

2.5.3 Minimum Requirements

- A. All buildings and structures must have complete gravity and lateral force resisting structural systems. Any system or method of construction to be used shall be based on a rational analysis in accordance with well-established principles of mechanics. Such analysis shall result in a system that provides a complete load path capable of transferring all loads and forces from their point of origin to the load-resisting elements.
- B. The building lateral force resisting systems shall be capable of withstanding design forces from wind and earthquake loading. The total lateral force shall be distributed to the various vertical elements of the lateral force resisting system in proportion to their rigidities considering the rigidity of the horizontal bracing system or diaphragm. Rigid elements that are assumed not to be part of the lateral force resisting system may be incorporated in buildings, provided that their effect on the action of the system is considered and provided for in the design. Provisions shall be made for the increased forces induced on resisting elements of the structural system resulting from torsion due to eccentricity between the center of application of the lateral forces and the center of rigidity of the lateral force resisting system.
- C. Buildings and other structures shall be designed to sustain local damage with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage. This shall be achieved through an arrangement of the structural elements that provides stability to the entire structural system. This shall be accomplished by providing sufficient continuity, redundancy, or ductility, or a combination thereof, in the members of the structure.
- D. Where specific design codes, standards, and regulations are not noted, structural design shall be in accordance with US Army Corps of Engineers Technical Instructions and Technical Manuals. Material designs may be completed using other industry standard references in conjunction with the referenced organizations within. In case of conflicting requirements, the more stringent design criteria shall govern.

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- E. The environmental conditions of the project location, including temperatures, shall be considered in the design of all structures.
- F. Structural system shall be compatible with building use. For example, columns shall not be located in rooms requiring visibility or open space, such as classrooms.

2.5.4 Design Loads

- A. Building Category: The building shall be classified as an essential facility (ASCE 7 Category IV; TI809-04 Seismic Use Group IIIE), due to function as a police station. Importance factor is 1.15 for wind, 1.2 for snow, and performance objective 3B for seismic for this classification.
- B. Dead Loads: Dead loads shall be according to the actual weight of materials. Weights of various building materials shall be taken from applicable tables of ASCE 7. Actual weight of equipment, mechanical, electrical and piping shall be used in design of the supporting structure.
- C. Live Loads: Live loads shall be according to requirements of ASCE 7. The following minimum live loads are required for this facility:
 - 1. Office Areas 2.4 kPa plus 1 kPa partitions
 - 2. Corridors and Stairs 4.8 kPa
 - 3. Mechanical Rooms 6.0 kPa and weight of equipment
 - 4. Vehicle Bays 12.0 kPa, uniform load, HS 20 wheel load
 - 5. Storage Areas 6.0 kPa
 - 6. Collateral Loads as required to support miscellaneous loads
- D. Snow Loads:
 - 1. Snow loads shall be in accordance with ASCE 7 and CEPOA-EN-TE-ST criteria.
 - 2. Ground snow load shall be 3.6 kPa.
 - 3. Minimum flat roof snow load shall be 3.0 kPa.
 - 4. Drift loading and unbalanced loading shall be in accordance with ASCE 7 requirements.
- E. Wind Loads: Wind loads shall be per ASCE 7. Design wind speed (3 second gust) is 40 meters per second, exposure "B". Consideration shall be given to wind uplift pressure for the roof system and shall be shown on the drawings.
- F. Seismic Loads:
 - 1. Seismic loads shall be per TI 809-4, Seismic Provisions for Buildings. Controlling lateral accelerations are as follows:
 - a) $S_s = 1.12$ g, 0.2 Sec. Period Spectral Acceleration
 - b) $S_1 = 0.31$ g, 1.0 Sec. Period Spectral Acceleration
 - 2. The dead load for seismic mass shall include 50% of the roof snow load.
- G. Non-Structural Components: Non-structural components (mechanical and electrical equipment, piping, ductwork, lights, suspended ceilings, etc) shall be restrained against seismic loads. Industry standards may be utilized where allowed by code. For other elements, restraint shall be designed.

2.5.5 Concrete

- A. Structural concrete shall be in accordance with ACI 318, minimum 28-day compressive strength = 28 MPa. The reinforcing of concrete walls, continuous footings, ties and bond beams shall be continuous and, therefore, typical details showing the arrangement of reinforcing at corners and intersections of these members shall be shown on the drawings.

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- B. Concrete mix design shall be approved by the Structural Engineer of Record and shall be suitable for the site weather conditions. At a minimum, air entrainment shall be 4 to 6 percent and water to cement ratio a maximum of 0.45.
 - C. Reinforcing shall be bars. Welded wire fabric is prohibited in slabs on grade construction.
 - D. Structural (elevated) slabs at the ground level may be required to meet geotechnical requirements determined by the Contractor's geotechnical engineer. Floor slabs shall be designed for code required live loads. Slabs in the Mobility Bays shall be designed for rack storage system and forklift vehicle traffic. Slabs in Parking Garage shall be designed for HS-20 loading.
 - E. Concrete slabs on grade, if used, shall be 100 mm thick minimum, except 150 mm minimum in the Mobility Bays and Parking Garage.
 - F. Non-slip finish shall be applied to slabs exposed in final construction.
 - G. Non-sparking floor hardener shall be applied in the Mobility Bays and Parking Garage.
 - H. Lightweight concrete is not readily available in Alaska.
- 2.5.6 Reinforced Masonry
- A. Normal weight concrete masonry units, grade N-1, type M mortar, $f_m = 10$ MPa.
 - B. Concrete grout fill $f_c = 14$ MPa, pea gravel aggregate, maximum W/C ratio = 0.56, 200 mm to 250 mm maximum slump. Grout all cells above and below grade.
 - C. Reinforcing steel per ASTM A615, Grade 60 and ASTM A706 for welded reinforcing steel.
- 2.5.7 Structural Steel
- A. Structural steel design and construction shall be in accordance with the American Institute of Steel Construction. All structural steel shall be shop primed, except that to be galvanized, field welded, receive spray applied fireproofing, or surfaces in slip critical connections. After erection, the field bolt heads and nuts, field welds, and any abrasions in the shop coat shall be cleaned and primed with paint of the same quality as that used for the shop coat.
 - B. Structural steel shall conform to A992 for wide flange sections; ASTM A36 or A572 for angles, channels, and plates; ASTM A500, Grade B for tube sections; ASTM A53 for structural pipe.
 - C. Shop connections for structural steel shall be welded and, in general, field connections shall be made with high strength bolts, ASTM A325 or A490 type connections. Load indicating washers or "twist-off" type bolts shall be used to indicate correct pre-tensioning of bolts. All connections shall be detailed on the final plans.
 - D. Steel Joists shall be designed, fabricated and erected in accordance with Steel Joist Institute Standard Specifications and Load Tables. Joist drawings and calculations shall be reviewed and approved by the Contractor's structural engineer.
 - E. All structural steel shall be concealed in architectural finishes. Bracing shall be concealed in the vertical plane of walls. Boxing around individual braces or steel elements is not allowed.
 - F. Steel stud wall systems may be used for interior non-bearing walls. Steel studs shall conform to the AISI specifications with galvanized finish.

SECTION 01010 DESIGN REQUIREMENTS**2.5.8 Metal Deck**

- A. Design and construction shall be in accordance with Steel Deck Institute design manuals and load tables. Required section modulus and moment of inertia shall be shown on the drawings.
- B. Minimum deck thickness shall be 0.75-mm (20 gauge) and shall have a minimum G60 galvanized coating. Button punching of roof deck diaphragm is not allowed.
- C. Architectural, mechanical, and electrical components shall not be supported directly from the metal deck. Attachments shall be to primary or interstitial framing members.

2.5.9 Cold Formed Metal Framing

- A. Design and construction shall be in accordance with AISI Specification for the design of Cold-Formed Steel Structural Members. Materials shall be ASTM A653, $F_y = 345 \text{ MPa}$ or ASTM A570 $F_y = 230 \text{ MPa}$

2.5.10 Submittals

- A. Submittals shall be prepared by suppliers and submitted to the contractor and engineer of record for review and approval. Provide copies of final approved submittals bearing the contractor's and engineer of record's review stamps to the Corps of Engineers.
- B. Shop drawings for fabrication, bending and placement of concrete reinforcement. Indicate grade of steel on shop drawings. Comply with ACI 315 "Manual of Standard Practice for Detailing Reinforced Concrete Structures" showing bar schedules, diagrams of bent bars, and arrangement of concrete reinforcement.
- C. Mix design for concrete, mortar, and grout. Testing for mix designs, using materials proposed for work in this project, shall have been performed not more than six months prior to placement of the mix in this project.
- D. Shop drawings for structural steel, steel joists, and steel decking showing layout, including complete details and schedules. Show assembly for structural steel, joist types, and metal decking types.
- E. Calculations and drawings for steel joists shall be sealed and signed by a registered professional engineer.

2.5.11 Inspections and Tests

- A. Provide inspection and testing of structural materials and construction through independent test agencies and laboratories.
- B. Testing and inspection shall be specified by the structural engineer of record based on the design methods and materials used. At a minimum, regular inspection and Special Inspection requirements shall conform to the requirements in TI 809-02 and FEMA 302.
- C. At a minimum, field quality assurance shall include sampling and testing of concrete during placement for temperature, air content, and slump. Strength test cylinders shall also be obtained.

SECTION 01010 DESIGN REQUIREMENTS**2.5.12 Physical Security of Arms and Ammunition**

- A. Two armories for the storage of Class II arms are required. The armory floors and roofs shall be constructed of reinforced concrete, and walls of reinforced concrete or concrete block per MILHDBK 1013/1A Table 14.

2.5.13 Anti-terrorism/Force Protection

- A. The new CSFC facility shall meet the requirements of UFC 4-010-01, DOD Minimum Antiterrorism Standards for Buildings for force protection and anti-terrorism.
- B. Structural hardening may be utilized to meet force protection objectives, however site control and standoff is preferred.
 - 1. Regardless of site control or standoff, structural framing around windows shall be designed to resist the minimum glazing pressures identified in UFC 4-010-01.

2.5.14 Geotechnical

- A. The Design-Build contractor's Geotechnical Engineer of Record shall be responsible for preparing design recommendations for the foundation system for the buildings and site features. The foundation recommendation report shall be sealed by the engineer in responsible charge, licensed as a civil engineer in the State of Alaska. A geotechnical findings report been prepared by the Government and included in the Appendix. However, it is the Contractor's responsibility to provide any additional fieldwork deemed necessary.
- B. The site is underlain by soils subject to liquefaction during seismic events. If liquefied, the soil may loose bearing capacity. The foundation design shall take into account the soil liquefaction potential and the essential classification of the building structure. A foundation that does not rely on surface soil bearing, such as piles, is anticipated.

2.5.15 Specific Structural Requirements

- A. The following structural elements shall be incorporated into the project.
 - 1. Exterior walls shall be constructed of split face block. Block may be either structural or veneer.
 - 2. Interior columns are prohibited in the mobility bays, parking garage, classroom, CATS room, and lecture hall.
 - 3. Depressed floor for computer access floor is required in portion of building - see Room Criteria Sheets.
 - 4. Vehicle wash bay in parking garage shall have CMU or reinforced concrete walls.
 - 5. Structural steel and reinforcing steel shall be bonded to electrical ground system.
 - 6. Bracing and mounting structure shall be provided in ceiling for projector in classroom.
 - 7. Walls around control center shall be CMU or reinforced concrete, with wall between control center and lobby fully grouted.

2.5.16 Acceptable Building Systems

- A. The following building systems are acceptable for this project, however other building systems meeting the requirements listed above and not specifically prohibited may be used.
 - 1. Steel pile foundations.
 - 2. Concrete floor slabs.
 - 3. Structural steel columns and beams.
 - 4. Engineered open web steel joists and girders.
 - 5. Reinforced masonry
 - 6. Reinforced concrete

SECTION 01010 DESIGN REQUIREMENTS**2.5.17 D/B Contractor Innovations**

- A. All D/B contractor innovations shall conform to the criteria outlined above.

2.5.18 Prohibited Items

- A. Items that do not meet the minimum requirements listed are not allowed for the structures of this project. Specific systems prohibited include:
1. Tension-only rod lateral bracing system. Lateral force resisting system braces must be designed to resist both tensile and compressive forces.
 2. Pre-engineered metal building systems.
 3. Metal strap lateral bracing system.
 4. Wood and light gauge steel framing bearing walls and shear panel systems.
 5. Tilt-up concrete walls or panels.

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.6 MECHANICAL DESIGN CRITERIA****2.6.1 References**

- A. Code Reference and Industry Standards Criteria: The design and construction shall comply with the latest editions of the following guides and standards and local codes and ordinances. Military publications can be obtained at the website: www.usace.army.mil.
1. International Building Code (IBC).
 2. Air Moving and Conditioning Association (AMCA).
 3. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE).
 4. American Society of Mechanical Engineers (ASME).
 5. National Fire Protection Association (NFPA).
 6. International Plumbing Code (IPC).
 7. American Society for Testing Materials (ASTM).
 8. American Water Works Association (AWWA).
 9. American Welding Society (AWS).
 10. Hydraulic Institute (HI).
 11. Military Standard 161F Signage and Labeling of Fuel System Components
 12. National Bureau of Standards (NBS).
 13. National Electrical Code (NEC).
 14. National Electrical Manufacturers Association (NEMA).
 15. Underwriters' Laboratories, Inc. (UL). All equipment shall bear the UL label or equivalent from a nationally recognized testing agency acceptable to the authority having jurisdiction.
 16. Underwriter's Laboratories, Inc., UL 1254, Standard for Safety for Pre-Engineered Type Dry Chemical Extinguishing System Units
 17. American National Standards Institute (ANSI).
 18. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).
 19. International Mechanical Code (IMC).
 20. Air-Conditioning and Refrigeration Institute (ARI).
 21. International Fire Code (IFC).
 22. All base materials shall comply with standards of ASTM and ANSI.
 23. Occupational Safety and Health Administration (OSHA).
 24. Environmental Protection Agency (EPA).
 25. National Environmental Balancing Bureau (NEBB).
 26. UFC 3-600-01 Fire Protection Engineering for Facilities.
 27. State of Alaska, Department of Environmental Conservation Requirements.
 28. COE TI 809-04 Seismic Design for Buildings.
 29. ETL 1110-3-466, Selection and design of oil/water separators at Army Facilities.
 30. MSS SP-69 Pipe Hangers and Supports-Selection and Application
 31. National Fire Protection Association (NFPA) 72
 32. Uniform Federal Guide Specifications (UFGS)
 33. Eielson Insulation HVAC Mechanical Guide
 34. Heating-Ventilation-Air Conditioning-Refrigeration Eielson AFB Standards

2.6.2 Designer Responsibility

- A. The Design-Build contractor's Mechanical Engineer of Record shall be responsible for the design of the complete mechanical system for the building. Complete mechanical system shall include plumbing, heating, ventilation, cooling, and all auxiliary systems such as compressed gases and emergency power. Mechanical system design shall be compatible and coordinated with the overall building design and function. The mechanical design drawings and calculations

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shall be sealed and signed by the engineer in responsible charge. The engineer shall be licensed as a mechanical engineer in the State of Alaska.

2.6.3 Summary

- A. These specifications and the Room Criteria Sheets constitute the basis for the building mechanical design and construction of the Consolidated Security Forces Complex. The contractor may use alternative design solutions and materials to meet the technical performance criteria. The alternative design solutions must provide methods, materials, workmanship, and quality of installation equal to, or better than, the minimal requirements of this specification section. Use metric units for design and construction.
- B. Specific requirements listed herein take precedence over conflicting requirements in the referenced documents.
- C. Design shall be carried out utilizing the Heating-Ventilation-Air Conditioning-Refrigeration Eielson AFB Standards (Checklist), see Appendix 13 for a copy of that document. The design and installation shall also incorporate the Eielson AFB Insulation Design Guide.

2.6.4 Scope

- A. Design and furnish all construction documents, labor, materials, equipment, supervision of labor, and performance of all operations required to completely install satisfactorily operating mechanical and plumbing systems. Major items of work include, but are not limited to, the installation of the following systems:
 - 1. Plumbing
 - 2. Steam and condensate piping
 - 3. Hydronic (Glycol) Heating
 - 4. Ventilation Systems
 - 5. Controls and Instrumentation
 - 6. Mechanical Rooms
 - 7. Shop Air
 - 8. Emergency Generator
 - 9. Oil Water Separators

2.6.5 General Design Conditions

- A. The mechanical systems for this facility shall be designed in accordance with the references listed above and for the design conditions listed below.

Project Location:	Eielson AFB, Alaska	
Elevation:	221 m	
Heating Degree Days: (Base 18° C)	7,933°C-Day	
Outside Design Air Temperatures:		
	Winter:	-50°C. DB
	Summer:	27° C. DB 16° C. WB
Inside Design Air Temperatures:		
Mobility Bay/Parking Garage	Winter:	18° C. DB
Other Occupied Areas	Winter:	21° C. DB
Mech/Generator/Fire/Storage	Winter:	16° C. DB

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Battlestaff/Communications/Control Center/NCOIC/SFCCO	Summer:	22° C. DB
All other areas	Summer:	24° C. DB

2.6.6 General Mechanical Materials and Methods

- A. Design decisions will be based on life cycle cost determinations and the impact on productivity and operating efficiency of the functions of the facility. Studies of other analysis will be made to consider the life cycle cost of the facility to arrive at an economical cost that takes into consideration not only the initial construction costs, but also the operating and maintenance costs of the building and its associated impact on the mission performance over the anticipated life of the facility.
- B. Full access for maintenance of mechanical equipment shall be provided. The area or structure where HVAC equipment is located and the equipment itself shall allow sufficient clearance for removing coils and filters without having to remove piping, structure, doors or other surrounding items. Access to all mechanical equipment shall be unhindered and a minimum of 1 m wide by 2 m high. Access shall not require crawling over or under structure, pipes or other items. Stairs with handrails shall be provided when equipment is located in a basement, on a roof or on a mezzanine greater than 460 mm above finished floor. Catwalks, operating platforms, ladders, and guardrails shall be provided where needed to provide reasonable access for maintenance of equipment located in any attics or suspended in high bay areas.
- C. Framed instructions laminated in plastic, including wiring, sequence of operations and control diagrams showing the complete layout of the entire system, shall be posted. Condensed operating instructions explaining preventive maintenance procedures, methods of checking the system for normal safe operation, and procedures for safely starting and stopping the system shall be prepared in typed form, framed as specified above for the wiring and control diagrams and posted beside the diagrams. The framed instructions shall be posted before acceptance testing of the systems.

2.6.7 Operating and Maintenance Data:

- A. Provide six (6) sets of each type of instructions, bound together in D-ring metal ringed hardcover binders with removable pages, with a typewritten index indicating location of items in the work. Any information not pertinent to this work shall be deleted or neatly and completely lined out. Binders shall be of capacity to allow a minimum of 20 percent expansion. Contractor shall provide 20 hours of training on controls including start up/shutdown and maintenance/calibration. O & M electric/electronic controls training sessions shall be video recorded, and the tape shall be included with the final O&M documentation.
- B. The contractor shall provide O & M training. A 95% complete submittal of corrected contract drawings indicating as-built conditions shall be submitted 15 calendar days prior to scheduled O & M training. The contractor shall correct deficiencies found during O & M training and updated drawings shall be submitted no more than 15 days after completion of training.
- C. The Contractor shall prepare operating and maintenance instructions containing information to operate, prolong service life or replace parts of the work. Operating and maintenance data shall specifically include:
 - 1. List of all contractors and subcontractors names, addresses and telephone numbers.
 - 2. List of all equipment and material manufacturers' local representatives and suppliers and their addresses and telephone numbers.
 - 3. Pipe and duct identification schedules.

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4. Nameplate directory with a list of all equipment indicating designation, location of equipment, manufacturers' name, model number, serial number, electrical characteristics, primary control switch location and normal position of switch.
 5. Valve directory indicating valve number, size, location, function, service, type and normal position.
 6. Air and hydronic test and balance report.
 7. Equipment Literature: Literature shall be grouped together by system, i.e., plumbing, heat generation, etc. For all equipment, fixtures, devices, valves and specialties, provide the following:
 - a) Manufacturer's data sheets and cut sheets.
 - b) Model and serial numbers.
 - c) Capacity curves, charts and calculations.
 - d) Electrical characteristics.
 - e) Replacement parts list.
 - f) As-built equipment piping diagrams.
 - g) As-built equipment wiring diagrams.
 - h) Manufacturer's instructions for operation and maintenance. Completely mark out on all literature sheets all non-applicable items. Where piping and wiring diagrams are not available from the manufacturer, the Contractor shall produce them.
 - i) Control Drawings with terminals wire numbers and sequence of operations.
- D. System Description: For each system section, the Contractor shall produce and include a basic system narrative description. Each narrative shall be comprised of the following:
1. Brief system description, including sequence of operation.
 2. Basic system function discussion, including any interaction with other systems or components.
 3. Primary system preventive maintenance procedures.
 4. How to isolate all major components.
 5. How to drain, fill and vent liquid system.
 6. How to drain, clean and refill all tanks, pumps and tube bundles.
 7. How to clean coils and change air filters for air systems.
 8. Emergency shutdown procedures.
- E. Master Maintenance Schedule: List each item of equipment requiring inspection and maintenance, showing required component maintenance and the intervals when such inspection and maintenance shall be performed (daily, weekly, monthly, semi-annually, etc.). For each item, reference the page within the maintenance manual, where detailed manufacturer's maintenance instructions can be found.
- F. All equipment shall be protected from corrosion. For products with protective coatings, specifications shall be written to require the products' corrosion protection bond to pass one of the industry standard adhesion tests.
- G. All mechanical systems, equipment, and controls installed outside heated spaces shall be designed and rated for the ambient condition in which they are installed.
- 2.6.8 Testing, Adjusting and Balancing
- A. The facility heating, ventilation and air conditioning systems shall be tested, adjusted and balanced in accordance with the standards established by the National Environmental Balancing Bureau (NEBB), American air Balance Council (AABC) or the Testing, Adjusting and Balancing Bureau (TABB). Standard forms shall be used. All work shall be performed in accordance with UFGS 15990A, Testing, Adjusting, and Balancing of HVAC Systems.

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- B. The final balance point setting of all HVAC adjustment devices including valves and dampers shall be permanently marked so that adjustment can be restored if disturbed at any time.
- C. The TAB Specialist shall review all design documents prior to construction, submit all recommendations to Contractor, and include this information in TAB report.
- D. The TAB Specialist shall witness all ductwork leakage tests.
- E. The Test and Balance Report must be submitted for review a minimum of 30 days prior to proposed date for Final Inspection.
- F. The TAB Specialist shall be either a member of AABC or an experienced technician of the Firm certified by the NEBB. The certification shall be maintained for the entire duration of the duties required for the project. If for any reason the specialist loses subject certification the Contractor shall immediately notify the Contracting Officer and submit another TAB Specialist for approval. All work performed by the TAB Specialist shall be considered invalid if the TAB Specialist loses its certification prior to contract completion, and the work must be performed by the approved successor.

2.6.9 HVAC System Commissioning

- A. Perform HVAC commissioning. Procedures for documenting and verifying the performance of all mechanical systems shall be in conformance with UFGS 15995A, Commissioning of HVAC Systems.
- B. The contractor shall designate team members to participate in the pre-commissioning checks and the functional performance testing specified in UFGS 15995A. In addition, the Government will be represented by a representative of the Contracting Officer, the Design Agent's Representative, and the Using Agency. The team members shall be as follows:

	FUNCTION
Q	Contractor's Chief Quality Control Representative
M	Contractor's Mechanical Representative
E	Contractor's Electrical Representative
T	Contractor's TAB Representative
C	Contractor's Control Representative
D	Design Agent's Representative
O	Contracting Officer's Representative
U	Using Agency's Representative

- C. Each checklist shown in UFGS 15995A shall be completed by the commissioning team. Acceptance by each commissioning team member of each pre-commissioning checklist item shall be indicated by initials and date unless an "x" is shown indicating the individual is not required.

2.6.10 Ventilation Survey

- A. The contractor shall coordinate through the Contracting Officer to arrange for and schedule the ventilation survey, which is to be performed by the 354th Bioenvironmental group. The contractor shall cooperate with the ventilation survey personnel in order that they can efficiently carry out the requirements of the ventilation survey.

SECTION 01010 DESIGN REQUIREMENTS**2.6.11 General Piping Minimum Requirements**

- A. The following items are typical for all piping installations.
1. Close all openings in pipes with appropriate caps, plugs or covers during progress of the work to preclude introduction of undesirable materials or contaminants.
 2. Slope all pipelines and provide low point drains, using hose end gate valves and high point vents, using specified automatic air vents.
 3. Provide valves and unions adjacent to all tanks and equipment for isolation and removal purposes. All valves shall be installed with stems vertical wherever possible, and in no case shall stems be oriented below horizontal.
 4. Ream ends of all pipes to full diameter free of burrs, nicks and sharp edges.
 5. Cut pipe accurately from measurements taken on the site. Springing or bending to fit on make up pipe will not be permitted.
 6. Bushings will not be permitted except on tanks and similar equipment. Close nipples will not be permitted.
 7. Reduction of pipe sizes shall be made with reducing tees or reducing fittings.
 8. All pipelines except piping under slab on grade shall be installed parallel with building lines and as high as possible. Piping shall clear all doors, windows and other openings. Avoid all ducts, light fixtures and similar equipment and conceal in finished areas wherever possible.
 9. Piping shall be supported in a manner to prevent binding, undue swing and vibration transmission to the structure.
 10. Where multiple pipes are clustered and routed in parallel, use trapeze hangers.
 11. Piping within finished rooms shall be concealed above suspended ceilings or within new walls and pipe chases.
 12. Coordinate the placement of concealed items requiring future maintenance, adjustment or replacement in such a manner that provides full access from an access panel, door, or suspended ceiling. Where needed, provide the access panel or door to these items.
 13. Threaded Joints: Apply Teflon tape to male equipment threads.
 14. Soldered Joints: Use Type 95/5 Tin-Antimony or an IAPMO approved, lead-free solder, for copper tubing.
 15. Ring gaskets, spiral wound with centering ring, shall be used with all flanges.
 16. Arrange piping along walls in horizontal groups, each group to be in one plane.
 17. All non-factory finished piping, insulated and non-insulated, and pipe/equipment supports shall be painted.
 18. Locate thermometers and gauges to permit observation by personnel standing on floor.
 19. Provide instrument cocks at pressure gauges.
 20. Provide insulating couplings, dielectric nipples or flanges to prevent electrolysis at dissimilar metal piping connections.
 21. Unions for copper piping shall be brass.
 22. Field check all valves for packing and lubricant. Replace leaking packing.
 23. Install valves to be accessible from floor level. Do not install valves with stem pointing downward.
 24. Provide isolation valves near all mechanical equipment requiring service.
 25. Provide isolation valves at each toilet group, for hot and cold water supply.
 26. Provide valves same size as line size. All ball valves shall be full port.
 27. Install swing checks and gravity closing lift checks in horizontal position.
 28. Provide gate blow-down valves and hose adapters at strainers, valves shall be the same size as strainer blow-off connection. Provide end caps at all hose adapters and drain down valves.
 29. Provide nickel or chrome-plated escutcheons on all pipes passing through walls, floors and ceilings in finished areas, and where piping is in corridors, closets or cabinets and subject to view when doors are open. Escutcheons shall cover the pipe sleeve and shall be set with screws or springs for holding plate in position.

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- B. Design and install piping with provisions for expansion and contraction using expansion loops, swing or expansion joints where required. Provide for expansion and contraction in mains, risers, and run-outs. Do not spring or force piping during installation.
- C. Flush all piping systems with clear water. Operate valves and other system components; drain and sterilize domestic water systems in accordance with requirements of AWWA C601 entitled: "Disinfection of Mains".
- D. Test all piping systems before concealing piping. Before testing, isolate or remove all equipment from system that would be damaged by test pressure. Purge or bleed air from piping systems before performing hydrostatic testing. Perform hydrostatic or pneumatic tests on piping in accordance with the following schedule. Maintain pressure for at least 24 hours.

System	Test Medium	Test Pressure
Heating Water	Water	1050 kPa
Domestic Water	Water	1050 kPa
Soil and Waste	Water	30 kPa, or top of vent
Plumbing Vents	Water	30 kPa, or top of vent
Rain Water Leaders	Water	30 kPa, or top of roof
Fuel Oil	Water	1200 kPa

2.6.12 Pipe Sleeves:

- A. Provide sleeves where pipes pass through walls, floors or ceilings. Sleeves in bearing walls, foundations, masonry or concrete walls and slabs shall be black steel pipe. All sleeves through frame or similar construction shall be 20 gauge galvanized sheet metal with edges turned 15 mm, installed flush with both sides of wall partition. All sleeves shall be flush with surfaces except mechanical rooms, basement floor and any wet floor area where seepage may occur. In such areas the sleeves shall project a minimum of 25 mm above floor.
- B. Size sleeves to allow 15 mm annular space between pipe insulation, or the bare pipe, and the pipe sleeve. The space between pipe and sleeve shall be filled with mineral wool or other non-combustible material to prevent passage of fire and smoke. The non-combustible material shall be caulked between pipe and sleeve at wall surface. The caulking shall have suitable smoke and flame retarding capabilities for the application as evidenced by U. L. testing and labeling.
- C. Where sleeves are installed in walls with high sound transmission loss or sleeve serves vibration-isolated pipe, sufficient space shall be provided between pipe and sleeve and packed with multiple layers of high-density sponge neoprene to reduce transmission of sound. Allow space on each side of opening and cover neoprene with non-combustible material and caulking, as required to seal opening in accordance with above requirements. Provide sound dampening sleeves at all mechanical room, fan room and conference room penetrations.
- D. For piping passing through sleeves in areas containing floor drains and in waterproof construction, caulk annular space between pipe or pipe insulation and the enclosing sleeve to attain a watertight installation. Caulk and finish with sealing compound.

2.6.13 Piping Hangers and Supports

- A. All piping within the confines of the building walls shall be rigidly supported from the building structure by means of hangers or supports.
- B. Support piping to maintain required grading and pitching of lines, to prevent and/or dampen excessive vibration, to secure piping in place and prevent any undue stain on the connected

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equipment. Lateral support against earthquake-induced forces shall be accomplished by positive attachments without consideration of friction.

- C. Arrange supports to provide for expansion and contraction. No drilling of structural members will be permitted. Hanger and supports shall have a minimum safety factor of 5, based upon ultimate tensile or compressive strength, as applicable of material used.
 - D. Provide bracing to prevent lateral motion.
 - E. Provide plastic coated hangers and supports for copper pipe.
 - F. Provide galvanized hangers and supports for hot-dipped galvanized sprinkler piping.
 - G. Do not support weight of piping from mechanical equipment, ductwork, pump flanges, coil connects, or piping of other trades and related items.
 - H. Provide insulation shields between hanger or support and piping for insulated piping.
 - I. Provide retaining clamp on all C-clamps and beam clamps.
 - J. Chain or straphangers "plumbers tape" will not be permitted.
 - K. Support vertical lines at bases with riser clamps
 - L. Provide trapeze type hangers for multiple parallel horizontal pipes.
 - M. Do not bend pipe hanger rods to provide alignment of piping offset from overhead supports.
 - N. Provide additional support for heavy valves, specialties, and sway bracing where required.
 - O. Provide pipe guides, anchors and expansion joints for all heating pipes, with one guide on each side of every expansion joint.
 - P. Remove rust from ferrous hanger equipment and rods, and apply one coat of rust inhibiting paint before, or immediately after, erection.
- 2.6.14 Pipe Hanger Schedule:
- A. MSS SP-69 Pipe Hangers and Supports-Selection and Application
- 2.6.15 Component Identification
- A. Piping Identification
 - 1. Contractor shall provide pipe markers that identify all piping, including domestic hot and cold water piping, with approved color coded adhesive bands that show fluid type, piping system identification and directional flow arrows.
 - 2. Piping identification label to be black letters not less than 50 mm high. Directional arrows shall be black, not less than 50 mm long, on yellow background. Piping identification and directional arrows shall meet ANSI A13.1-81.
 - 3. Identify piping at 5 m centers in all rooms, as well as in all the other spaces (such as shafts) in which piping may be viewed. There shall be at least one set of identifying bands per pipe in each space requiring identifying bands. In addition, the origination of each pipe main shall be further identified indicating the zone served.

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- B. Valve Identification
 - 1. Identify valves in all areas with 50 mm x 100 mm identification tags installed on handwheels or stem with brass bead chain. Identification tags shall be engraved, indicating the service abbreviation, stating whether normally open (engraved on green) or normally closed (engraved on red). Install tags with brass jack chain on handwheel or stem.
 - 2. Service abbreviation shall match piping service identification label. In addition, each valve tag shall include a unique sequential identification number. Where valves are located above suspended ceilings, provide colored pin markers in ceiling tiles to allow location of valves.
- C. Equipment Identification
 - 1. Manufacturer's nameplates shall be provided on all equipment identifying manufacturer's name, model number, size, capacity, and electrical characteristics. Leave manufacturer's nameplates clean and legible.
 - 2. Identify all equipment with engraved identification tags showing symbol number and service as shown on the concept drawings. Securely fasten identification tags to equipment.
- D. Identification Charts
 - 1. Provide clear plastic laminated valve charts. Pipe identification chart shall list piping systems with symbol and color-coding where applicable. Valve identification chart shall list valve model numbers and symbol for service corresponding to piping symbol. Mount identification charts in Boiler room and Fire Pump Equipment Room.
- E. Duct Identification
 - 1. Identify all primary outside, return, exhaust and supply air ducts with black-stenciled letters applied directly to duct or insulation, if applicable. Supply air duct identification shall include zone or space served.

2.6.16 Insulation

- A. Comply with the Eielson Insulation HVAC Mechanical Guide.
- B. All insulation materials, including linings, jackets, facings, wet or dry adhesives, and vapor barriers, shall meet requirements of NFPA 90A. Flame spread rating shall not exceed 25 and smoke developed rating shall not exceed 50, as defined in ASTM E84.
- C. Provide insulation on all hydronic heating and domestic water piping systems. Insulation shall be fiberglass. Provide complete with vapor barrier permeability rating of $1.149 \text{ ng/s-m}^2\text{-Pa}$, and with a thermal conductivity of $k=.036 \text{ W/m-K}$ at 38 degrees C mean temperature.
- D. Provide PVC pipe fitting covers and seal ends of fiberglass insulation with mastic.
- E. Provide cold piping systems with a continuous vapor seal. No staples or pins are permitted on cold water piping system insulation.
- F. All non-factory finished fiberglass insulation shall be finished with glass cloth and two coats of mastic.
- G. Piping insulation shall be continuous at all hangers and supports with rigid inserts and sheet metal shields.
- H. Rigid Insulation Inserts for Pipe: Calcium silicate, or approved substitute, for installation between pipe and hanger. Provide cellular foam glass inserts for all cold piping systems.

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Insulation inserts shall be not less than 150 mm long for 40 mm to 65 mm pipe, and 225 mm long for 75 mm to 150 mm pipe; thickness equal to adjoining insulation.

- I. Galvanized Metal Shields: 16 gauge for 90 mm and smaller pipe, and 14 gauge for 100 mm and larger; formed to fit the diameter of the insulation, extending up to the centerline of the pipe. Length equal to insulation hanger inserts.
 - J. Metal Jackets
 - 1. Aluminum jackets shall be 0.63 mm thick, have an embossed finish, and meet ASTM B209. Jacket sections shall be joined using longitudinal slip joints with a minimum 50 mm lap, caulk, and seal between all metal seams. Jacket shall be secured with 12 mm wide by 0.8 mm thick annealed stainless steel bands.
 - 2. Provide aluminum jackets on all insulated piping exposed in the mechanical room and in finished areas up to 3 m above finished floor.
 - K. Piping Insulation
 - 1. Hydronic Heating Piping: 40 mm pipe and smaller, 25 mm thick; 50 mm to 150 mm pipe, 40 mm thick. Domestic Hot, Cold, and Recirculating Piping: All pipe sizes, 25 mm thick. Piping Subject to Outside Ambient Temperatures: All pipe sizes, 40 mm thick. Roof Drainage: 25 mm thick.
 - 2. Plumbing vents: 1200 mm below roof insulation to termination above roof line, 25 mm thick.
 - L. Component Insulation
 - 1. Insulate all components such as valves, traps, strainers, condensate receivers with removable fiberglass insulation with removable canvas jacket and reusable attachment system.
 - M. Ductwork Insulation:
 - 1. Provide exterior insulation on all outside air ductwork, outside air intake plenums, relief air discharge and 1200 mm upstream of exhaust ductwork. Insulation shall be fiberglass with a $k=0.035$ W/m-K at 24 degrees C or better. All insulated ducts shall be covered with 50 mm of insulation with a factory applied vapor barrier and multipurpose FSK facing. All non-factory finished fiberglass insulation shall be finished with glass cloth embedded with 2 coats of mastic.
- 2.6.17 Provide exterior insulation on all outside air ductwork, outside air intake plenums, relief
- Vibration Isolation and Seismic Restraint:
- A. Furnish and install vibration isolating mountings and hangers for all equipment having reciprocating or rotating parts and for any other equipment, piping, or vessels that produce or transmit objectionable vibrations, pulsations, or noises.
 - B. Furnish vibration isolators in the proper load range for the weight of the equipment supported. The natural frequency of the isolator shall be one-third to one-fifth of the lowest vibration frequency of the equipment or system where the isolator is used. When the equipment is mounted on a structure that is not rigid, the resilient mounts shall provide deflection that is at least four times the dead load deflection of the supporting structure. Isolators shall be selected so that deflection of each isolator on a piece of equipment is essentially identical.
 - C. The following listed equipment shall be fitted with earthquake bracing and snubbers for seismic control. Manufacturer supplying bracing and snubbers and data submitted for evaluation and approval shall perform an analysis of all of the installations. Such items shall be as manufactured by Mason Industries, Inc. or equal.
 - 1. Air-handling units

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2. Boilers
 3. Heat Exchangers
 4. Expansion tanks
 5. Unit heaters, Radiant Heaters
 6. Hot water generators
 7. Utility fans
 8. Air Compressors
- D. All other central equipment, machinery, and tanks shall be fitted with bracing, anchors or snubbers for seismic control per COE TI 809-04. Lateral support against earthquake-induced forces shall be accomplished by positive attachments without consideration of friction. Analysis and restraint design shall be accomplished by the Contractor and submitted for evaluation and approval.
- E. Two nuts shall be provided on each bolt for equipment secured with cast in place, expansion or chemically bonded anchor bolts.
- F. All vibrating equipment and the interconnecting pipe and ductwork shall be isolated to eliminate the transmission of objectionable noise and vibration from the structure.
- G. Provide vibration hangers to support all piping and ductwork runs within the first 2 m nearest the connection to rotating equipment.
- H. Vibration mounting isolators sizes shall be determined by the isolator manufacturer and shall be installed in accordance with the manufacturer's instructions.
- I. Refer to UFGS 15070A, Seismic Protection of Mechanical Equipment for pipe hanger spacing and rod sizes.
- 2.6.18 Plumbing System
- A. Provide a complete domestic water, waste and rainwater system designed and sized to serve all plumbing fixtures, and drains as described within this RFP and the room criteria sheets. Slope all slabs to drains
- B. Design Criteria
1. The domestic water, waste and vent systems shall be designed, sized, constructed, tested, and inspected, in accordance with the most recent International Plumbing Code and all local code amendments. Do not connect storm drain to sewer piping service.
 2. All domestic water piping shall be sized for a maximum pressure drop of 11.3 kPa/10m of piping, and a maximum velocity of 2 m/s.
 3. Provide hot water heaters sized in accordance to the ASHRAE 1999 HVAC Applications Handbook, Service Water Heating. Water heaters shall be steam heat exchangers manufactured by Aerco or PVI with helical coils. The domestic hot water supply temperature shall be set at 60 degrees C, adjustable.
 4. The sewer service shall have a lift station with duplex pumps to discharge via a force main into the nearest suitable location. Locate lift stations only inside Mechanical Rooms with high level alarm tied into the Central Control System.
 5. Multiple sewer main connections are permissible, if deemed cost effective.
 6. Floor drains shall be located at all low points of floors in rooms with plumbing; install trap primers, unless indicated otherwise.
 7. All plumbing piping in the maintenance shops, and other areas with doors to the outside shall have piping located to prevent freezing pipes if doors are inadvertently left open during cold weather.

SECTION 01010 DESIGN REQUIREMENTS**C. Materials**

1. Domestic water piping shall be type L copper tubing conforming to ASTM B88 with ANSI B16.22 fittings. Solder shall conform to ASTM B32, 95-5 tin antimony or IAPMO approved lead free. Above grade waste, drain, & vent piping shall be CISPI 301 cast iron no-hub with cast iron couplings. For forced discharge mains, use DWV copper, Type L, with soldered joints, the same as domestic water piping.
2. Below grade waste drain and vent piping shall be CISPI HSN cast iron hub and spigot with compression type neoprene gaskets.
3. Valves shall be all bronze ball or gate type with a minimum Class 200 pressure rating.
4. Provide plumbing fixtures as indicated in the Room Criteria Sheets. To the greatest extent possible, plumbing fixtures shall be from one manufacturer. All fixtures shall be institutional quality.
5. Water closets, urinals and lavatories shall be vitreous china; all counter top sinks shall be of stainless steel construction. Provide fixtures and faucets complete with all required specialties, trim, supports, and related items.
6. Water closets shall be flush valve type with elongated bowls and open-front seats without covers.
7. Provide low flow water conservation 0.14 L/s faucets, 6 L per flush water closets, and 0.16 L/s shower tempering valves.
8. Provide screwdriver-operated stops and escutcheons on all piping connections to fixtures.
9. Furnish chrome plated adjustable cast brass P-trap with tubing drain to wall. Size to match tailpiece with chrome plated escutcheon.
10. Provide duplex, heavy-duty sewage ejectors with epoxy coated steel sump, duplex wet pit non-clog vertical column grinder pumps, non-slam check valves, and factory control panels with all relays and contacts as required for the central control system interface, including a hard-wired local alarm light and exterior-mounted rotating beacon.
11. Provide barrier-free refrigerated water cooler 8 mL/s of 10 degrees C water at 32 degrees C ambient air temperature and 27 degrees C entering water temperature. Provide unit with push bars, and satin finish stainless steel cooler top and backsplash.
12. Provide Emergency Eyewash/Deluge Showers, freeze proof type meeting OSHA and ANSI standards. Supply with recirculated tempered water and provide all required safety and identification signage. Provide flow sensors and horn strobe warning system to indicate emergency use of unit. Horn strobe shall be similar to fire alarm horn strobe.

D. Minimum Basic Requirements

1. Each domestic water branch pipe shall be controlled by a ball valve where it connects to the supply main or riser. Each toilet room, group of fixtures, or isolated fixture shall be separately controlled by valves in an accessible location and provided with access doors where necessary.
2. At all fixtures except water closets, install and connect hot water on left and cold water on right, as viewed when facing the fixture.
3. Install water hammer arresters at water connections to shock-producing fixtures and plumbing groups with flush valves or solenoid valves. Water hammer arresters to be sized and installed per Plumbing and Drainage Institute Standards.
4. All domestic hot water systems shall use a recirculating system, piped from each farthest fixture on a supply loop.
5. Slope all domestic hot and cold water lines, and provide low point drains to facilitate the complete drain down of the building.
6. Pitch underground cast iron pipe within the building a minimum of 20 mm/m (2%) in the direction of flow. Make changes in direction of drainage lines with 45-degree wyes, long turn wyes, or sweep bends. Use long turn fittings wherever space conditions permit. Provide waterproofing around all lines penetrating through foundation walls and floor slabs.

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7. Provide cleanouts at the base of each stack, each change in direction, and on a minimum of 15 m centers at horizontal runs. Cleaning screws, deck plates, and other plugs shall be made up with graphite and oil only; use no grease or cement.
 8. Pitch plumbing vent lines to allow for drainage of condensation; terminate vents 400 mm above the roof.
 9. Encapsulate all exposed P-Traps, angle stops, and supply piping, located under handicap accessible lavatories and sinks, with fire resistant, molded foam, insulation per ADA requirements.
 10. Traps, valves, water hammer arresters, and automatic devices in concealed piping shall be provided with access doors. The doors shall be stainless steel for toilets and prime-coated for painted areas. Provide U. L. rated access doors to match wall construction rating.
 11. Floor trench drains shall be provided with sand and grit traps.
 12. Plumbing vents shall terminate minimum 250 mm inches above roof and shall be minimum 100 mm diameter for prevention of frost closure.
- E. Wash Bay Floor Drain. Wash Bay floor drain shall drain through a coalescing plate oil/water separator and discharge to the septic system.
1. Slope floor in Wash Bay to drain. Slope floors in parking area to drain away from Wash Bay or provide physical barrier to prevent liquids from parking areas entering Wash Bay drain.
 2. Provide sand and grit trap at floor drain. Size trap to hold a minimum of 0.11 cubic meter of sediment. Design trap to be easily cleaned.
 3. Provide a coalescing plate oil/water separator, rated for the flow rate of the pressure washer, to separate and store oil so the oil content of effluent is 10 ppm or less at 0.63 L/sec. Provide heavy traffic rated cleanout and access openings to the oil/water separator for maintenance, cleaning and pumping.
 4. Arrange tanks and separator to avoid interference with vehicles and washing operations. Coat all tanks for corrosion protection.
 5. Slope the discharge pipe to drain. Avoid any low spots or traps in the line that could freeze and cause a blockage.
- 2.6.19 Hydronic (Glycol) Heating Systems
- A. The building shall be provided high-pressure steam from the Base steam system to heat a treated glycol system with duplex pumps, and a heat exchanger. The pressure reducing station shall include 1/3-2/3 control valves, moisture eliminator, bypass, flash tanks, reliefs and comply with Base Standards. Provide a condensate receiver and pump to return the condensate against back pressure to the Base system. Steam and condensate piping and accessories shall be according to Section 2.3 and the Eielson Utilidor Check List. Non-ferrous piping or fittings shall not be used for steam or condensate piping.
- B. Provide a complete hydronic heating system designed and sized to serve all hydronic heating terminal units as described within this RFP and the Room Criteria Sheets. A 60/40 ethylene glycol hydronic heating solution and duplex hydronic heating pumps will serve the distributed building heating system. Cabinet unit heaters shall heat arctic entries. Perimeter baseboard radiation terminal units shall heat the perimeter building spaces. Each room shall be on a separate heating zone, with a minimum of one hydronic zone valve per room. The valve shall be operated in sequence with the zone terminal unit and its reheat valve, if one is present, by the room sensor.
- C. Design Criteria
1. The building heating system shall be designed to maintain interior building temperatures as indicated in the forgoing table. The building infiltration rate shall be based on the ASHRAE crack method with a 24 km/h design wind speed. The minimum infiltration rate

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for entries shall be 2 air changes per hour (AC/HR) per ASHRAE 62-1999. The design heating load shall be calculated with a 1.2 safety factor for shell transmission losses and a 1.3 safety factor for infiltration losses. Design safety factors shall also be applied to the hydronic terminal units.

2. All terminal units, and reheat coils shall be sized with a 12 degrees C hydronic fluid temperature drop. All terminal units shall be de-rated and selected for a glycol heating solution.
3. All head loss calculations shall be corrected for a glycol/water solution and all hydronic heating pumps shall have a 1.2 safety factor. All hydronic heating piping shall be sized for a maximum pressure drop of .35 kPa/m of piping.

D. Materials

1. Hydronic heating piping 80 mm and under shall be type L copper tubing conforming to ASTM B88 with ANSI B16.22 fittings. Solder shall conform to ASTM B32, 95-5 tin antimony or IAPMO approved lead free. Piping over 80 mm shall be ASTM A-53, grade B, carbon steel with welded or flanged type fittings equal and comparable to the piping.
2. The glycol shall be Dowtherm SR-1, or equal, Ethylene glycol inhibited fluid as manufactured by Dow Chemical Company, or equal. Glycol solution shall be factory premixed with de-ionized or distilled water. Silicon based inhibitors shall not be used (automotive glycol shall not be accepted as an alternative). The solution shall contain corrosion inhibitors and be compatible with all wetted parts of the system.
3. Heat exchangers shall be constructed according to ASME requirements for pressures and temperatures encountered and be compatible with fluids used.
4. Valves shall be all bronze ball or gate type with a minimum 150 psi pressure class rating.
5. Pumps shall be maintenance-free, in-line, single stage, base mounted, cast iron volute with stainless steel impellers and motor shaft. Each primary glycol circulation pump shall be provided with an alternate backup pump. The pump motors shall be premium high efficiency type motors. The primary and backup pumps shall be piped and valved so that one can be removed for maintenance and the other started, without a loss of service to the facility. Air handling unit pre-heat coils and entry cabinet unit heaters shall be 3-way, and all other control valves shall be 2-way. The circulation pumps shall be operated through a variable frequency drive, which adjusts the flow based on a pressure sensor in the system piping.
6. All pumps shall be system lubricated where possible.
7. Isolate piping from pump vibration with flexible connectors. Connectors shall be corrugated stainless steel with double steel outer braid for piping under 50 mm. Provide twin sphere neoprene connectors with flanged ends for piping over 50 mm.
8. Isolation valves and pressure gauges shall be installed on suction/discharge sides of pumps. Balance valves shall not be used as isolation valves.
9. Pressure gauge ports shall be taken from piping, not pump flanges.
10. Balancing valves shall be installed on the discharge side of all pumps. Triple duty valves shall not be used.
11. Remote booster pumps shall not be used.
12. Pressure gauges and isolation valves shall be installed at the fill point and at circulating pump suctions/discharge.
13. Flow measurement equipment shall be installed at all pumps.
14. For glycol make-up provide a factory packaged make-up system complete with 200 liter corrosion-proof tank, pump, pressure switch, and all necessary interconnecting pipe, wiring, and controls.
15. Baseboard finned tube radiation shall have enclosures with full back plates, ball bearing brackets and cradles, copper tubing/aluminum finned elements, and 16 gauge enclosure construction.
16. Heating coils shall be ARI 410 certified factory tested for 1400 kPa working pressure. Coils shall be aluminum finned copper tube construction. Air handling unit coils shall be minimum one row coils, drainable with factory vent and drain connections. De-rate coils for use with glycol solution.

SECTION 01010 DESIGN REQUIREMENTS**E. Minimum Basic Requirements**

1. Provide automatic air vents at all high points and hydronic terminal units. Air vents shall be Hoffman 79 or equal. Provide 15 mm isolation ball valves.
2. Provide pressure gauges, and Pete's Plugs, or equal, across heat exchangers, coils, and pumps. Provide thermometers at all piping connections to heat exchangers.
3. The Contractor shall enlist the services of an established water treatment company to monitor the flushing, chemical cleaning and filling of all glycol and boiler water systems. The water treatment company representative shall sample and test glycol and water systems at initial start-up and provide necessary inhibitors and water treatment to insure conformance with boiler and glycol manufacturers recommendation. The water treatment company shall analyze samples of glycol solution and boiler water at time of building acceptance, and shall provide their comprehensive report to the Contracting Officer.
4. After flushing and draining hydronic piping systems, circulate for a period of 6 hours a solution heated to 90 degrees C of 1 kg of tri-sodium phosphate for each 500 L of water in system. Upon completion, completely drain systems at all low points. Remove, clean, and replace strainer baskets. Refill system with a factory pre-mixed solution of corrosion inhibited ethylene glycol and water.
5. Provide glycol make-up system with a 200 liter glycol make-up storage tank, manually operated electric powered make-up pump, which shall be a non-ferrous type suitable for this use. Supply pressure to the system shall be controlled with an adjustable pressure-regulating valve in the make-up supply line. Provide a manual by-pass for filling system.
6. Provide manual balancing valves similar to a B&G circuit setter to regulate water flow through each piping loop, coils, terminal units, and at other heating equipment and piping, for proportioning flow.
7. Pressure gauges shall be provided on each side of each pump, heating coil, heat exchanger and filter. Pressure gauges at each side of pumps shall be attached to the piping and not to the pump flanges. All pressure gauges shall be provided with isolation valves. Pressure gauges on glycol lines shall be provided with pin type pulsation snubbers. Temperature gauges shall be provided on each side of coils and heat exchangers.
8. Glycol loop temperature shall be reset linearly according to outside air temperature and shall not exceed 93 degrees C. The reset schedule shall not allow return water temperatures to drop below 65 degrees C, where entering the heat exchangers. The reset schedule shall be adjustable.
9. Hydronic piping systems shall be reverse-return systems.
10. Balancing valves shall be installed on all bypass and return lines serving control valves. Furnish a hydronic balancing-meter for the project, compatible with the installed valves.
11. Balancing valves shall not serve as an isolation valve anywhere in the system. Combination balancing/isolation valves shall not be used.
12. Thermal expansion and contraction of the glycol solution shall be compensated through a diaphragm type expansion/contraction tank.
13. Expansion tanks, heat exchangers, glycol make-up tank, base mounted pumps and other large equipment shall be mounted on minimum 100 mm high reinforced concrete housekeeping pads. The equipment locations shall be coordinated and arranged for optimum upright access, with at least 1 m wide by 2.5 m high free area around equipment.
14. Provide isolation cocks on all pressure gauges.

2.6.20 Ventilation Systems

- A. Ventilation system will consist of a supply fan, return fan, preheat coil with filter rack, heat coil with filter rack, relief section, intake section, and 100% economizer operation. Variable frequency drives shall be provided for the supply and return fan motors. Inlet guide vanes or dampers shall not be used for volume control. Filters shall be 40% efficient Farr 4040 or as accepted. Each heating coil shall be sized for the entire heating load including outside air. The outside air intake shall be split into the outside air required for occupied ventilation air and the

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balance of the air intake required for the total of 100% outside air for economizer. The intakes and reliefs shall be located above grade to comply with force protection guidelines or be ducted through the roof to hoods. Each intake will have a motorized damper. The intake shall be an arctic hood type with an inlet velocity low enough to avoid carrying snow into the inlet. The birdscreen will be a minimum of 1" square galvanized mesh. The ceiling may be used as a return air plenum. The system shall have a shutoff switch as required. Air to air heat exchanger coils shall be used to recover heat from locker room/toilet exhaust air streams and transfers to the incoming outside air.

- B. Variable Frequency Drives
 - 1. Shall have: (1) A bypass switch and magnetic starter for across-the-line start as an integral part of the drive, (2) start up services of a factory trained service technician, and (3) comply with IEEE 519-1992 and with current Federal Communications Commission (FCC) Rules and Regulations, Part 15, Subpart J which limits radio frequency interference levels.
- C. Use of the ceiling plenum for return air is acceptable. Care shall be taken to provide acoustical separation between areas and avoid cross talk. Lined elbows, sound traps or other components shall be used to accomplish this.
- D. The ventilation system shall be a VAV reheat type with pressure independent terminal units and heating coils for each zone. The supply and return fans shall have variable frequency drives and airflow stations so they can track and operate together to maintain duct and building pressure. Terminal units shall have a minimum 50% air flow setting to maintain ventilation. Air flows shall be calculated to maintain a 15 degree F difference between inside and outside.
- E. Mobility Bays will have an air handling system similar to the main air handling system. Unit will consist of a supply fan, return fan, preheat coil with filter rack, heat coil with filter rack, relief section, intake section, and 100% economizer operation. Filters shall be 40% efficient Farr 4040 or as accepted. Each heating coil shall be sized for the entire heating load including outside air. The outside air intake shall be split into the outside air required for occupied ventilation air and the balance of the air intake required for the total of 100% outside air for economizer. Each intake will have a motorized damper. The intake shall be an arctic hood type with an inlet velocity low enough to avoid carrying snow into the inlet. The birdscreen will be a minimum of 1" square galvanized mesh. The supply air shall be supplied from the ceiling with emphasis to the exterior wall and overhead door. The return air shall be taken from the back, or interior, of the room within 18" of the floor. A carbon monoxide sensor will operate an audible alarm and operate the system at 100% outside air above a reading of 800 ppm or as set. Both intakes will be closed during unoccupied periods and the temperature set down. No exhaust fan, slab heat or unit heater will be required. The DDC system shall control all of the points in the system.
- F. Toilet rooms and janitor closets shall be equipped with exhaust fans ducted directly outdoors.
- G. Mechanical ventilation for cooling shall be provided for the Mechanical Room. The system shall utilize free cooling and mix and filter outdoor air with room air to maintain the cooling set point via modulation of outside and return air control dampers. Provide an arctic hood with air trap, to prevent cold air migration, for air intake.
- H. Space Pressure Maintenance shall be carried out to maintain a slightly positive (0.51 mm W.C. to 1.27 mm W.C.) overall building pressure when compared to outside. Certain spaces, including maintenance bays and storage areas, shall be maintained at the appropriate pressure relationships to adjacent spaces in accordance with the International Building Code and International Mechanical Code.

SECTION 01010 DESIGN REQUIREMENTS**I. Design Criteria**

1. The general building ventilation system shall be sized, designed and installed in accordance with:
 - a) ASHRAE Standards and Handbooks.
 - b) SMACNA HVAC Duct Construction Standards.
 - c) NFPA 90A Installation of Air-Conditioning and Ventilation System.
 - d) International Mechanical Code.
 - e) 23rd Edition (1998 – Metric) ACGIH Industrial Ventilation Handbook.
 - f) Heating-Ventilation-Air Conditioning-Refrigeration Eielson AFB Standards
2. The office areas shall be maintained under a positive pressure with respect to the exterior and the Mobility Bays and Parking Garage. The general ventilation system shall provide minimum occupant fresh air ventilation in accordance to ASHRAE 62-1999. Cooling shall be designed to maintain space temperatures at 25 degrees C, whenever the outside air is 16 degrees C or warmer. The air handling unit shall be sized to deliver an average rate of 6.42 L/s-m2 minimum to office areas. This figure is an average and a computer-software cooling load calculation should be performed to derive space specific occupant, cooling, and exhaust airflow requirements.
3. Prepare an energy budget for the facility in accordance with TI-800-1, Chapter 11.
4. The toilet rooms, locker rooms, and janitors closets shall be exhausted according to ASHRAE 62.
5. The design room noise criteria (NC) inclusive of all mechanical equipment shall be:
 - a) Offices and Admin. spaces NC-30
 - b) Range Maintenance NC-40
 - c) Vehicle Maintenance NC-40
 - d) Common areas NC-35
 - e) Kitchen NC-35
 - f) Dining Room NC-35
 - g) Mechanical and Electrical rooms per OSHA
6. Low velocity ductwork will be sized by the equal friction or equal velocity methods. Supply ducts will be sized at .65 Pa/m maximum. Medium velocity ductwork, above pressure class of 500 Pa shall be sized using the static regain method with an industry recognized computer program.
7. Low velocity ductwork shall be constructed and conform to a minimum SMACNA pressure class of 750 Pa, Seal Class B, and applicable Leakage Class requirements. Material shall be galvanized steel. Medium velocity ductwork shall conform to SMACNA pressure class above 500 Pa, Seal Class B and the applicable Leakage Class requirements. Fiberglass ductwork not accepted.
8. All outside air and relief air openings shall be sized for a maximum velocity of 2.5 m/s. Intake and relief openings shall be through hooded openings, louvers without hoods are not acceptable due to blowing snow. Intake openings shall be inverted "T" Arctic hoods and discharge openings shall be through standard hoods with outside drop leg equal to 2 times the width of the average hood cross sectional area. The drop leg length is measured from the bottom of the wall opening.

J. Materials

1. Air-handling Units: Provide and install complete factory-assembled air-handling units sized to serve the building as described within this RFP. The frames shall be constructed of 14-gauge galvanized steel. The casings shall be constructed of 18-gauge galvanized steel with double wall construction. Units shall be insulated with 50mm thick, 72 kg/m3 fiberglass insulation with full galvanized steel liner and mylar film barrier behind perforated liner. Provide units with an application-specific controller, furnished by the HVAC Central Control system manufacturer. Provide the following standard factory sections:
 - a) Supply fan section
 - b) Glycol heating coil and combination summer/winter filter

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- c) Filter box section with ASHRAE 52.1-92 30% efficient, UL Class 1, 50 mm thick filters.
2. Mixing box section with positive shut-off low leakage dampers.
3. Provide all sections with drain pans to facilitate full wash down.
4. Fans shall be tested in accordance with the procedures of AMCA 210 and shall bear the UL label and AMCA certified rating seal.
5. Diffusers, grilles and registers: Provide all diffusers, grilles and registers of steel construction with opposed blade volume dampers. Provide all ceiling supply diffusers with round inlet necks. Provide all linear slot supply diffusers with sound lined plenums.
6. Flexible ducts shall be UL 181, Class 1, Air Duct material complying with NFPA 90A and 90B. Duct shall be of a factory fabricated assembly composed of a black CPE liner permanently bonded to a corrosion resistant helically wound spring steel wire; supporting a 25 mm thick fiberglass insulation blanket; 5.745 ng/s-m²-Pa fiberglass reinforced metalized film laminate vapor barrier with integral brass hanger grommets. Duct shall have a pressure rating of 1500 Pa positive, a 250 Pa negative and a maximum velocity rating of 20 m/s.
7. All fire dampers shall be installed in accordance with NFPA and IBC requirements.
8. Positive shut-off dampers shall be low leakage, thermally isolated, type with insulated airfoil blades (minimum U value of 2.6 W/m²-K). Seal shall be extruded silicone with a leakage rate of 25 L/s-m² at 1000 Pa differential static pressure.
9. Ceiling "Paddle" fans shall be the four blade paddle type suitable for mounting in low ceiling applications. Fans shall be multiple speed, reversing type with wall mounted control. A minimum of three speed or variable speed controllers shall be provided. All controls including on/off, speed and directional control shall be located in a recessed wall mounted electrical box. Rotating assembly shall be balanced to prevent any visible run-out or oscillation at all speeds and in both directions.

K. Minimum Basic Requirements

1. All ventilation equipment shall be installed on the warm side of the facility. No equipment shall be installed on the roof or require roof access for maintenance.
2. All specified equipment shall be in mid-range of catalogued performance to allow for adjustment.
3. All ductwork shall be hung, supported and installed in accordance with "Low Pressure Duct Construction Standards" published by SMACNA. Ductwork shall be supported to prevent and/or dampen excessive vibrations and with full seismic bracing.
4. All fans shall be provided with inlet and outlet sound attenuators, sound lining, or acoustical enclosures as required to meet the maximum acceptable sound power levels in each room.
5. Rectangular elbows shall have double thickness, extended edge, turning vanes.
6. Straight duct sections of at least 7.5 duct diameters shall be shown from fan discharge, elbows and open duct ends.
7. All flexible ductwork shall be secured to the sheet metal collars or diffuser necks with nylon "zip strips". Trim excess strip and covered with duct tape. All flexible ducts shall be limited to a 1600 mm maximum length.
8. Provide flexible connections between all fans and ductwork. Flexible connection material shall be UL listed, fire-retardant, neoprene coated, woven glass fiber fabric, in accordance with NFPA 90A with a minimum weight of 9 kg/m² and crimped into 75 mm wide and 24 gauge thick galvanized steel collars.
9. The flexible connections shall be suitable for 1-1/2 times the duct pressure at the connection. Flexible separation shall not be less than 150 mm between separated metals.
10. All building intake or exhaust air outlets shall have hoods with 25 mm mesh screens, and positive shut-off motorized control dampers.
11. Insulate all outside air ducts and plenums. Insulate all exhaust ducts from the building exterior penetration to 1200 mm downstream of ductwork.

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12. All mechanical penetrations through exterior building surfaces shall be sealed weather tight i.e. brazed seams and joints. All wall and roof penetrations shall be flashed, counter-flashed, and caulked. Roof penetrations shall be constructed in accordance with roof manufacturer's recommendations.
13. Seal all ductwork joints with SMACNA approved sealing system. Test duct systems above 25mm WC pressure to prove air tightness. The TAB Specialist shall witness duct leakage testing. Make tests prior to application of any external insulation before erection of enclosing construction. Duct leakage test procedures shall be in accordance to the SMACNA HVAC Air Duct Leakage Test Manual. Make corrections of leakage as required. Maximum total system acceptable leakage shall correspond to SMACNA HVAC Air Duct Leakage Test Manual.
14. Contractor shall provide a minimum of 14 days advance notice before performing an air balance so that Base HVAC Shop Personnel can be present to witness the procedure. Perform the air and hydronic balancing, testing and adjusting in conformance with American Air Balance Council (AABC) or National Environmental Balancing Bureau (NEBB) guidelines to achieve specified design values. Record the noise level of all rooms, inclusive of air and hydronic noise, at full flow. Correct the deficiencies required to comply with specified NC-values for each room. Submit a complete report listing all the initial and final readings.
15. Branch ducts:
 - a) Branch ducts shall be offset from the main trunk duct (not opposite each other), to allow better balancing performance.
 - b) Each branch duct take-off shall have one of the following dampers: manually operated, opposed blade damper; manually operated, single blade damper; quadrant-type volume damper.
 - c) Manual volume dampers shall be installed at all branch duct connections upstream of registers/diffusers.
 - d) Branch ducts to registers/diffusers shall be a minimum length of two duct diameters.
 - e) Volume dampers shall be located two duct diameters from fittings and as far as possible from outlets
 - f) All duct chases shall have lighting with exterior on/off switches readily accessible.

L. Fans:

1. All fans shall be provided with inlet and outlet sound attenuators, sound lining, or acoustical enclosures as required to meet the maximum acceptable sound power levels.
2. Fans shall be provided with access to fan through fan guard.
3. Return fans shall not be used if return loss is less than 250 Pa. The building static pressure shall not exceed 25 Pa above ambient.
4. Access doors/panels shall be provided to reach areas needing periodic cleaning (i.e. reheat coils, VAV boxes, etc.).

M. Air Handling Units:

1. Air handling units shall have preheat and reheat coils installed.
2. Air handling units shall be double-walled with the capability of every water coil being washed down internally into a drain integral to the unit.
3. Access shall be provided on both sides of coils for removal and cleaning.
4. All air handling units shall be installed with sufficient space to remove coils and filters (access doors must be able to fully open).
5. Air handlers located above a suspended ceiling shall have a servicing platform that extends 750 mm from the edge of the equipment and a clear workspace of at least 900 mm must be provided above the equipment on the controls side.
6. Catwalks and ladders shall be provided to allow access to all elevated air handlers.
7. Air handlers with a coil area greater than 2.3 m² shall be provided with inside lighting.

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8. Coils shall be equipped with the following items: drain pans with drain lines piped to indirect waste line or floor drain; sufficient space for cleaning; air bleed valves; 30 mm minimum condensate drains with piping sloped 20 mm/m (2%)(cooling coils).
 9. Filter frames shall be of a standard size.
 10. Grease (zerk) fittings shall be extended to a single, readily accessible point.
 11. A thermometer shall be installed in all discharge air ductwork and all mixed air sections.
 12. Control valves shall be installed outside of air handling units in a readily accessible location.
 13. A minimum distance of 2-1/2 times the equivalent fan discharge duct diameter shall be provided between the return air fan and the return air and exhaust air dampers, 6 times if outlet velocities are greater than 30 m/s.
 14. Return fans shall be equipped with variable inlet vanes, variable pitch blades, variable discharge dampers, or motor speed control if system uses economizer controls (do not rely on relief vents).
 15. The reheat coils shall be sized for full flow/capacity of the system in the event the Preheat Coil may be inoperable.
 16. Upon completion of construction the filters in the air handling units will be replaced with new filters.
- N. Filter Gauges:
1. Dwyer type, or equal, differential pressure indicators shall be installed across all air filters.
- O. Louvers, Dampers and Mixing Boxes:
1. Pressure independent dampers shall be installed with VAV boxes.
 2. Full quadrant balancing dampers shall be provided for all fresh air and return air ductwork to all air handling units.
 3. Duct access doors shall be installed on both sides of all dampers.
 4. High efficiency dampers shall be used on all outside air dampers and mixing boxes.
- P. Air Conditioning:
1. Provide computer type unit with compressor to provide cooling 24 hours to the Battlestaff, Communications, and Control Center. Supply and return air shall be ducted into each room. The unit shall be Liebert or equal with a glycol cooler, pump and control package, and dry cool economizer. Condensate shall be piped to the building plumbing system. Ventilation shall be provided from the main air-handling unit. Each system requires a separate outside air intake for ventilation air.
- 2.6.21 Automatic Temperature Controls
- A. A complete direct digital control (DDC) system shall be installed to serve the entire building. The preferred system manufacturer is Siebe Network 8000 or equal. Provide complete DDC system according to UFGS 15951.
- B. Design Criteria
1. Manufacturer's Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
 2. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.
 3. Provide a minimum of 32 hours of on-site operator training for each building to include, but not limited to, start-up, shutdown, maintenance and calibration.
- C. Requirements
1. The DDC system software shall include but not be limited to:
 - a) Time of day, calendar based and holiday scheduling
 - b) Temporary schedule overrides;

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- c) Optimal start;
 - d) Night setback control;
 - e) Enthalpy or temperature switch over;
 - f) Fan speed/flow control;
 - g) Heating water temperature reset;
 - h) Electrical power, water and gas consumption monitoring;
2. The DDC system main control panel shall be located in the first floor mechanical room and shall be complete with LCD Interface (Optiview). The DDC system shall be provided with a fiber optic interface to the EMCS Ethernet network. Modems are required for current operation and will be replaced with central computer connection at a future date.
 3. The DDC system shall monitor electric, water and condensate consumption.
 4. A complete points list and sequence of operations shall be shown on the drawings.
 5. The sequence of operations shall include, but not be limited to, the following:
 6. Air Handling units: Standard VAV air handling unit control to provide control of fan speed, heating coil, and economizer dampers to maintain discharge temperature and supply air duct static pressure. The DDC system shall regulate the return fan speed to maintain the supply and return fan differential air volume and maintain general building positive pressure.
 7. CO2 sensors shall be provided for conference and classroom terminal units. All set points shall be adjustable in software. Terminal box primary air shall modulate open proportionally from the minimum position as the CO2 differential concentration rises above 400 PPM. If the differential concentration exceeds 700 PPM, the air handling unit outside air damper shall be modulated open to reduce the differential.
 8. VAV reheat terminal units: On night cycle terminal units control valve cycled by DDC system to maintain night set-back temperature. On day cycle, when heating is required, terminal unit shall be at minimum cfm and the heating control valve opens. On a call for cooling, the terminal unit heating coil valve closes, and terminal unit primary air damper modulates open from minimum to maximum air volume. Zones with perimeter heat shall operate the control valve as Stage 1, and the VAV terminal coil as Stage 2.
 9. Heating Water System: The heating water system shall be software interlocked to operate on demand from any air handling unit or zone. The heating system shall be disabled if all air handling units or zones do not require hot water heating. The heating system shall operate for a minimum of 30 minutes if activated. The DDC system shall start the lead hot water pump and operate them on a lead-lag basis.
 10. Control panels shall contain all logic devices and operational setpoint controls, System operating controls and gauges shall be mounted through the cabinet face. Each controller shall be capable of stand-alone operations and shall be complete with battery back-up and manual operator override capability with a local hand-off-auto switch and 4-20 mA slider control of the output signal. Specifically, each valve shall have a manual lever that can be set to maintain temperature(s) locally. Local control shall include custom sequences of operation for mechanical equipment, HVAC systems and terminal unit. System shall be expandable. For on-site use, provide all necessary hardware to connect a portable laptop computer; the government shall furnish the computer.
 11. Sensors shall be electronic, with remote set-point adjustment.
 12. Room zone valves shall have a manual bypass or override. Room sensors shall only be adjustable remotely from the control panel. Each air handling unit shall be zoned to serve similar rooms; dissimilar spaces shall be on separate systems to allow proper ventilation rate and temperature control. In open areas, provide a thermostat for every 100 square meters.
 13. Control system shall not have any automatic reset low limit switches.
 14. Steel channel structural supports shall be provided for any actuators installed on sheet metal thinner than 16 gauge.
 15. All mechanical equipment (including mechanical rooms, etc.) shall be a part of the central control system. The control points and alarm input/outputs shall include, but are not limited to, all fan/pump motor above 1 kW, status monitoring via current transformers and failure alarms; low hydronic system pressure alarm; dirty filter alarms; freeze-stat trip

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alarm (no auto reset); high sewer sump alarm; general fault; glycol make-up tank low level alarm.

- D. Provide complete building start up and commissioning in accordance with applicable portions of UFGS 15995A, Commissioning of HVAC Systems.

2.6.22 Mechanical Rooms

- A. Mechanical room entrances shall be large enough to facilitate movement of large equipment to and from mechanical room. Double doors with separate access outside of facility are preferred.
- B. All framed walls within mechanical rooms shall be constructed using cement board. (i.e. no gypsum board).
- C. Hot and cold water hose bibb connections with back-flow preventers shall be provided in mechanical rooms.
- D. Mechanical rooms shall have a minimum of one floor drain, with trap primer.
- E. Mechanical room floors shall slope to floor drains.
- F. 115 Volt power outlets shall be provided in mechanical rooms.
- G. Clearance shall be provided to remove, replace and maintain air filters, heat exchanger coils and hot water heating coils. All manufacturers recommended clearances shall also be provided.
- H. All access for maintenance shall be of an ergonomic design.
- I. All elevated units shall have catwalks and ladders to provide access.
- J. Combustion air systems shall be designed so the gravity combustion air inlet prevents cold air from "dumping" into the room and the outside air ventilation fan includes motorized mixing dampers arranged to mix outside air and return air to 13 degrees C.
- K. Inlet and exhaust openings for all facilities shall have hoods and louvers where they penetrate the exterior wall.
- L. Mechanical rooms shall be provided with ventilation allowing for a set temperature no higher than 27 degrees C.
- M. Mechanical room lighting shall be adequate for maintenance of all equipment.
- N. Mechanical rooms shall not be used a return plenums.
- O. Copies of the following drawings shall be laminated in clear plastic and placed in the mechanical room:
 - 1. Ductwork drawings
 - 2. Piping drawing
 - 3. Valve schedule
 - 4. Control schematics
 - 5. Description of Control Operations

2.6.23 Shop Air System

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- A. Design Criteria
 - 1. Provide shop air system for maintenance. The system shall be sized for the outlets indicated on the room criteria sheets with a 60% diversity using standard air tools and operating at 1030 kPa. Shop air piping shall be sized at a maximum pressure drop of .5kPa/m. Minimum shop air piping shall be 25 mm. Hose drops to each station shall be 20 mm and have a cartridge type filter/drier/regulator with a ball valve and 15 mm male hose threads.
 - 2. Air compressor shall be Ingersol Rand Model 2545E10V, or equal, rated at 1030 kPa at 991 L/s. Receiver shall be 380 liter.
- B. Components
 - 1. Shop air compressor shall be a duplex reciprocating unit with integral receiver, receiver drain down valve, safety relief, automatic moisture separator and drain, Low oil pressure switch, main pressure regulator, main filter, and heavy duty air inlet filter and silencer. Install unit on concrete housekeeping pad with spring vibration Isolation and seismic restraint.
 - 2. Shop air piping shall be Type K hard drawn copper water tube with silver soldered joints.
 - 3. Provide isolation valve, regulator, filter with metal guard, gauge, duplex quick disconnects, and drip leg with blow down valve at each shop air outlet. Install shop air branch piping to each drop outlet from the top of the main.
 - 4. Provide wall mounted shop outlets where indicated. Outlets shall include one 25 mm quick disconnect.

2.6.24 Emergency Generator

- A. Provide inlet and outlet air connections to cool the radiator and exhaust piping with muffler as recommended by the generator manufacturer. Piping shall be schedule 40 black steel with flexible connector, drip leg with blow down, ventilated thimble through the roof and approved cap to cover the end of the pipe.

2.6.25 Seismic Protection

- A. All mechanical piping, ductwork and equipment shall be seismically braced. Provide all necessary steel, hardware, devices and factory-manufactured components required for seismic protection of all mechanical equipment furnished under this contract.
- B. Design Criteria
 - 1. Design bracing and snubbers in accordance with Corps of Engineers Guide Specifications, Section 15070, "Seismic Protection For Mechanical Equipment." In particular, follow TI 809-04, "Seismic Design for Buildings," referenced in the stated document. The design shall also comply with AFM 88-3.
 - 2. Follow manufacturer's recommendations in selecting all factory-furnished devices.
 - 3. Submit an analysis of all required seismic control for evaluation and approval, as relating to mechanical equipment.
 - 4. Provide snubbers and flexible bracing as required for vibration isolation and earthquake protection. Use preferred factory-furnished equipment and devices to the extent feasible.
- C. Preferred Items:
 - 1. Piping adhesive labels: W. H. Brady Company's "Quick Label", or equal
 - 2. Valve tags: Bemis Lamicoid, or equal
 - 3. PVC fitting covers: Zeston, or equal
 - 4. Vibration Isolators: Mason Industries, or equal
 - 5. Plumbing Fixtures: American Standard, Kohler, or equal
 - 6. Plumbing Faucets: American Standard, Delta, or equal
 - 7. Flush Valves: Sloan Co., or equal

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8. Water Coolers: Haws, or equal
9. Access Doors: Zurn, Model Inspectors Z-1460-5, or equal
10. Glycol: Dow Chemical Company, Type Dowtherm SR-1 (Ethylene Glycol), or equal
11. Automatic Air Vents: Hoffman, Model 79, or equal
12. Duct Sealant: Hardcast, or equal
13. Circulating Pumps: Bell & Gossett, Grundfos, or equal
14. Air Handling Units: Trane, McQuay or equal
15. Heat Exchangers: Shell and Tube
16. Cooling systems: Liebert with dry coolers and dry cool economizer, or equal.

2.6.26 Prohibited Items:

- A. Items, which do not meet the minimum requirements listed, are not allowed for the mechanical systems for this project. The following specific systems are prohibited for this project:
 1. Roof mounted equipment and any ductwork outside the building envelope.
 2. Dielectric unions.
 3. Mono-flo and single pipe systems.
 4. Gravity relief air dampers.
 5. Automotive glycol and/or silicone-based inhibitors.
 6. Ozone depleting substances.
 7. Materials and systems which are not suitable for Arctic environment
 8. Bolted water storage or fuel storage tanks.

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.7 ELECTRICAL REQUIREMENTS****2.7.1 References**

- A. The design and construction shall comply with the latest editions of the following guides and standards and local codes and ordinances. Military publications can be obtained from at the web site: *www.usace.army.mil*.
1. ADAAG American Disabilities Act Accessibility Guidelines.
 2. Air Force Instruction (AFI) 32-1061, Providing Utilities to Air Force Installations.
 3. Air Force Instruction (AFI) 32-1063, Electric Power Systems.
 4. Air Force Instruction (AFI) 32-1064, Electrical Safe Practices.
 5. Air Force Instruction (AFI) 32-1065, Grounding Systems.
 6. Air Force Joint Manual (AFJMAN) 32-1082, Facilities Engineering Electrical Exterior Facilities.
 7. Air Force Joint Manual (AFJMAN) 32-1080 (TM 5-811-1), Electrical Power Supply and Distribution.
 8. Air Force Occupational Safety and Health (AFOSH).
 9. All base materials shall comply with standards of ASTM and ANSI.
 10. American National Standards Institute (ANSI).
 11. EIA/TIA 568B Commercial Building Telecommunications Wiring Standard.
 12. EIA/TIA 569A Commercial Building Standard for Telecommunications Pathways and Spaces.
 13. EIA/TIA 606 Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.
 14. EIA/TIA 607 Commercial Building Grounding and Bonding Requirements for Telecommunications.
 15. EIA/TIA TSB 67 Transmission Performance Specifications for Field Testing of Unshielded Twisted Pair Cabling Systems.
 16. IEEE C62.41 Surge Voltages in Low-Voltage AC Power Circuits.
 17. IEEE STD 242 Recommended Practice for Protection and coordination of Industrial and Commercial Power Systems.
 18. IEEE STD 399 Recommended Practice for Industrial and Commercial Power Systems Analysis.
 19. IEEE STD 81 Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System (Part 1).
 20. Illuminating Engineering Society of North America, I.E.S.N.A Lighting Handbook.
 21. International Building Code (IBC).
 22. Life Safety Code (NFPA Article 101).
 23. MIL-HDBK-419A Grounding, Bonding and Shielding for Electronic Equipments and Facilities.
 24. MIL-HDBK 1190 Facility Planning and Design Guide.
 25. MIL-HDBK-1857 Grounding, Bonding and Shielding Design Practices.
 26. National Electrical Manufacturers Association (NEMA).
 27. National Electrical Safety Code (NESC).
 28. National Fire Protection Association (NFPA).
 29. NETA, International Electrical Testing Specifications for Electric Power Distribution Equipment and Systems.
 30. NFPA 101 Safety to Life from Fire in Buildings and Structures.
 31. NFPA 70 National Electrical Code.
 32. NFPA 72 National Fire Alarm Code.
 33. Rural Utilities Service Criteria.
 34. Underwriters' Laboratories, Inc. (U.L.). All equipment shall bear the UL label, or equivalent, from a nationally recognized testing agency, acceptable to the authority having jurisdiction.

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35. Unified Facilities Criteria (UFC) 3-520-01, Interior Electrical Systems – Design.
36. Unified Facilities Criteria (UFC) 3-550-01, Electrical Power Distribution.
37. Unified Facilities Criteria (UFC) 3-600-01, Fire Protection Engineering for Facilities - Design.
38. Unified Facilities Criteria (UFC) 4-010-01, DoD Minimum Antiterrorism Standards for Buildings - Design.
39. Unified Facilities Criteria (UFC) 4-021-01, Mass Notification Systems – Design and O&M.
40. Uniform Federal Guide Specifications (UFGS).
41. International Fire Code (IFC).
42. USACE Electronic Security Systems Technical Manual (TM) 5-853-4.
43. USAF Engineering Technical Letter (ETL) 02-12 Communications and Information System Criteria for Air Force Facilities.
44. USAF Engineering Technical Letter (ETL) 99-4, Fire Protection Engineering Criteria and Technical Guidance – Emergency Lighting and the Marking of Exits.
45. USAF Installation Force Protection Guide
46. USAF Technical Instruction 811-16 Lighting Standards Basic Design Criteria

2.7.2 Designer Responsibility

- A. The Design-Build contractor's Electrical Engineer of Record shall be responsible for the electrical design. Complete electrical design shall generally include exterior and interior power distribution, exterior and interior lighting, grounding, controls, alarms, emergency power systems, and communication. The electrical design drawings shall be sealed and signed by the engineer in responsible charge.

2.7.3 Scope

- A. Furnish all labor, materials, equipment and supervision of labor for the complete and satisfactory design, construction and installation, but not limited to the following electrical systems:
 1. Relocation of Overhead Primary distribution on the site.
 2. Installation of the communication distribution system.
 3. Exterior power distribution/head bolt outlets.
 4. Exterior site lighting.
 5. Interior power distribution and lighting.
 6. Standby generator with automatic transfer switch.
 7. Interior telecommunication distribution.
 8. Exterior and interior grounding.
 9. Interior fire alarm/detection system.
 10. Security system with video retention.
 11. Public address system.
 12. CCTV system raceway.

2.7.4 Basic Design Criteria of Electrical Systems

- A. Power system shall be completely designed in accordance with the latest edition of the NEC, NESC, and in accordance with the requirements herein.
- B. Lighting
 1. Exterior Lighting: Provide exterior lighting to illuminate parking area, building entrances/exits, and building perimeter. Exterior lighting design shall meet force protection requirements including those outlined in UFC 4-010-01, the USAF Installation Force Protection Guide and TM 5-853-4. Photocell and time clock control by a computer-based controller shall be provided. The controller shall have manual override capability. The exterior fixtures shall be Energy efficient pulse start metal halide and shall have

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sharp cutoff characteristics meeting SPiRiT requirements. The design lighting levels shall meet force protection requirements and as follows:

- a) 5 fc minimum 10 meters around the building.
- b) 0.5 fc minimum in parking areas - 15 to 1 maximum to minimum uniformity.
- c) Building illumination shall extend a minimum 2.4 meters up exterior walls.
2. Interior Area Lighting: Energy efficient fixtures with T8 lamps and electronic ballasts shall be used. In offices and training areas/classrooms with suspended acoustical tile ceilings provide three and four lamp pendent direct/indirect fixtures (70% up light and 30% down) or three and four lamp parabolic recessed fluorescent light fixtures. In corridors provide recessed lensed fixtures. In rooms with gypsum wallboard ceilings provide wrap around surface mounted acrylic lens fluorescent fixtures. In exposed structures with no ceiling provide pendant mounted fluorescent or metal halide fixtures. All three-lamp fixtures shall have 2 level switching. Pendent direct/indirect fluorescent fixtures with 30% up light and 70% down light may be used in the larger mobility bay, garage and open ranks area. Concern over immediate light in these areas shall be a consideration for selecting the light fixture type approach. Occupancy sensors shall be used extensively for lighting control and shall be applied in perimeter rooms to meet SPiRiT requirements. Lighting control units shall control the corridors and exterior lighting. Lensed fixtures may be used in areas where it glare is not a consideration. Direct/indirect lighting fixtures shall be used in areas where it is important to shield the light source at angles of more than 45 degrees
3. Interior Lighting Intensities: Lighting intensities shall follow I.E.S. and Mil recommendations. Specifically, room lighting shall be designed to meet the following horizontal luminance criteria:

a) Training/Classrooms	50/75 fc – dual level switching
b) Corridors	10 fc
c) Offices	50 fc
d) Restrooms	20 fc
e) Mechanical/Elect	15 fc
f) Comm. Rooms	50 fc
g) Mobility/Garage	50 fc
h) Armory	50 fc
4. Interior Lighting Calculations: Calculations shall be based on the actual finish material reflectances or a maximum of 80% for the ceiling, 50% for the wall and 20% for the floor, whichever is lower. The foot-candle levels shall be calculated using light loss factor of 0.7 and the ballast factor of the supplied equipment. Minimum lighting levels shall conform to the IES and MIL-HDBK 1190, Chapter 9, Table 9-4
5. Illumination criteria in accordance with guides and standards listed above. Exterior lighting luminaires shall be mounted on tapered steel poles for area lighting of building exterior, and parking areas. No floodlights or wall packs are permitted except for smaller wall lights near or above doors. All light standards shall be constructed to withstand 160 kph wind loading with a 1.3 gust factor.
6. High Intensity Discharge (HID) Ballast. ANSI C82.4, metal halide pulse type for interior areas and high-pressure sodium lamp ballast for exterior areas.
7. Feed branch circuits supplying exterior fixtures through electrically operated, mechanically held lighting contactors. The contactors shall be mounted indoors and controlled automatically. Site lighting luminaires shall be high-pressure sodium (HPS) type lamps and equipped with low-temperature ballasts. Luminaires shall incorporate cut-off type optics with no up-light component.
8. Mount exterior fixtures such that they are protected from damage from ice dams, or snow/water/ice shed from the roof.
9. General lighting schedules shall include lamp type, voltage, and power consumption in VA, type of mounting, manufacturer and catalog number.
10. Control switches for general room lighting shall be located at room entrances. Room with more than one door shall have three-or four-way switches. Use occupancy sensors in

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areas such as janitor's closets, small storage areas, sleeping rooms, and work areas not continuously occupied.

11. Emergency lighting shall be provided per NFPA 101 and ETL 99-4 except signage shall be red letters on white background.
 12. Exit signs shall be of the internally illuminated light emitting diode (LED) type. Interior lighting fixtures shall be as indicated in room criteria sheets.
 13. Provide energy-efficient fluorescent fixtures unless otherwise noted, with energy-saving ballasts.
 14. Fluorescent Ballast. ANSI C82.1, rapid start, high power factor type electronic ballast with less than 20% harmonic distortion. Provide end-of-life sensing technology in ballasts for T5 and smaller lamps.
 15. Fluorescent lamps: Deluxe phosphor type with 3500K, 88+ CRI, T8 or 4-Pin Quad tube compact lamps. U-bent tubes are not permitted. Lamps shall be low mercury type lamps that conform to EPS's TCLP (Toxic Characteristic Leaching Procedure).
 16. Exit Pathway Emergency Lighting: Battery-operated lighting fixtures shall provide exit pathway lighting. The exit pathways shall be lighted to a level of at least 1.0 fc at the floor level.
 17. Exit Signs: All of the exit signs shall be LED type exit signs with battery backup.
- C. Standby Generator and Power Arrangement: Provide a four-stroke-cycle, diesel-fired, standby rated generator unit set inside the building. The size of the generator shall be selected to power critical loads associated with the facility. Critical loads include: ANG CSC, AD Control Center, AD SCFF, AD NCIOC/SFCCO, CER (computer equipment room), mobility bays, Armories, locker rooms, Open Ranks, and mobility supply rooms, AD police services parking garage, electrical/generator room, communications room, minimal corridor lighting, chiller (AC) for the control/computer core area, and approximately half of the building's AHU's, pumps and fans. Provide a 3-pole automatic transfer switch to automatically start the generator and transfer the loads to the generator during loss of primary power. Provide a distribution panel for to serve separate specific "standby power" panels. The transfer switch and distribution panel shall be sized appropriately for the expected load. The generator shall use the best available technology to limit emissions, using DFA #1 fuel. Provide silencer and mounting isolation to maintain a residential quality installation. Provide integrated double walled fuel day tank of adequate capacity for required standby period. Obtain required base emissions standards approval for generator set as provided.
1. Generator Set Monitoring: Alarm and status information shall include the following:
 - a. Operating Status
 - Start
 - Run
 - Switch "OFF" (Not in "AUTO" position)
 - b. Alarms
 - Low oil pressure pre-alarm
 - Low oil pressure shutdown
 - Low coolant temperature
 - High coolant temp pre-alarm
 - High coolant temp shutdown
 - Overcrank shutdown
 - Overspeed shutdown
 - Low fuel
 - Low DC voltage warning
 - High DC voltage warning
 - Owner selected fault
 - Owner selected fault
 - Common alarm
 - c. Engine/AC Data
 - Oil pressure
 - Coolant temperature

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AC Volts L1-N
AC Volts L2-N
AC Volts L3-N
Current L1
Current L2
Current L3
Frequency
Power factor
Kilowatts
Reactive power – kVAR
Energy, mW-hrs

- d. Auxiliary Equipment: Control and Annunciation: Provide as necessary modules each with 8 Form C (5A at 250 VAC) relay outputs for monitoring of generator status.

D. Electrical Service

1. Primary Power: Extend MV primary underground to a pad-mounted transformer from existing primary line #6, currently routed across the site. It may be necessary to relocate or place the existing primary underground depending upon the final site layout. Risers, fuses and cutouts shall be necessary as required for connection to the primary.
2. Primary Service Conductors: Underground primary cables shall consist of underground cable in conduit. Provide 15 KV conductors with EPR insulation with PVC jacket or XPLE with HDPE jacket that meets the requirements of Corps of Engineers Guide Specifications, UFGS 16375. The conduit duct bank shall be a minimum of 3 meters from the edge of the road.
3. Main Service: Provide a pad-mounted dual-primary transformer converting 7200 delta or 12470 VAC wye to 120/208 VAC, 3-phase, 4-wire, wye. The transformer shall be equipped with disconnect switch and extended tap changers. The transformer shall be sized appropriately for the expected load. Transformer size shall be confirmed with base electrical. Provide a concrete pad (including grounding), underground secondary, and single main fused disconnect. The single main service fused disconnect is to be located on the outside of the building near the main electrical room.
4. Metering: Provide separate metering for both the ANG (Air National Guard) and enlisted (active duty) areas. Provide two 120/208 VAC, 3-phase, 4-wire switchboards (MDP's) with current transformers and power monitoring equipment. The MDP's shall serve panelboards and large equipment through feeder circuit breakers. Each MDP assembly shall serve loads specific to the ANG side and enlisted side. Loads for common areas shall be served from the enlisted side distribution. Provide electrical power service monitoring instrumentation on the service entrance main distribution panel.

E. Interior Power Distribution

1. MDP's: MDP's shall be surface mounted or free standing. Circuit breakers shall be of the bolt-on type. Bussing shall be copper. Short circuit ratings shall be noted with the MDP schedules on the drawings. Full size neutral and grounding buses shall be specified for all MDP's. The service Main Distribution Panels (MDP's) shall be equipped with Transient Voltage Surge Suppression.
2. Distribution and Branch Panelboards: Distribution and branch panelboards shall be surface or flush mounted. Provide separate specific panels served via the automatic transfer switch and supported by the standby generator upon primary power loss. These panels are to serve the critical loads and areas previously mentioned. Circuit breakers shall be of the bolt-on type. Bussing shall be copper. Short circuit ratings shall be noted with the panelboard schedules on the drawings. Full size neutral and grounding buses shall be specified for all panelboards.
3. Provide MDP's with power monitoring equipment on the incoming feeder to provide the features and monitor the following parameters:
 - a) Current, per phase

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- b) Neutral current
 - c) Voltage, line to line
 - d) Voltage, line to neutral
 - e) Real power, kW
 - f) Reactive power, kVAr
 - g) Apparent power, kVA
 - h) Power factor
 - i) Frequency
 - j) Real power demand, kWd
 - k) Reactive power demand, kVAr
 - l) Apparent power demand, kVAd
 - m) Real energy, kWh
 - n) Apparent energy, kVAh
 - o) Energy accumulation modes
 - p) KYZ output
 - q) RS-485 and Modbus RTU connection
 - r) THD, voltage and current
4. Provide separate panels for each of the following types of loads:
- a) Office area lighting, convenience receptacles, and general power
 - b) Central "core" area (main control room, battlestaff room, computer equipment room)
 - c) Mechanical Equipment
 - d) Exterior Lighting
5. Provide connections, services and equipment required for proper connection and operation of all equipment furnished or planned, presence denoted, or required in other portions of these specifications. Such equipment shall include, but not necessarily be limited to, mechanical systems equipment (fans, boilers, pumps, etc.), utilization equipment (drinking fountains, computers, copiers, etc.), shop equipment, and government-furnished-government-installed equipment.
6. Maintain integrity of penetrations intended to be waterproof. Provide flashing at all penetrations of waterproof membranes.
- F. Motors, Disconnects and Starters
- 1. General: Motor and Circuit Disconnects shall be sized for the specific circuit and application in which they are used. Each motor shall be provided with a local, horsepower rated disconnect. Circuit disconnects shall have ampere ratings equal to or greater than the ampere rating of the circuit supplying the equipment. All disconnects shall be of the heavy-duty type.
 - 2. Motor Starters: Unless special considerations require selection of other types of starters, starters shall be horsepower-rated and shall consist of toggle-type manual starters for fractional horsepower motors and full NEMA size units sized for those motors greater than 0.37 kW in size or of 3-phase configuration. Starters shall be equipped with red run pilot light, control transformer, start-stop push-buttons or H-O-A switches as required and connected so control will be shut down when the disconnect switch is opened for any reason.
 - 3. Where motors exceed 14.71 kW in rating and do not warrant VFD controllers provide auto-transformer reduced voltage starters or solid-state, soft-start controllers.
- G. Conduit and Raceway
- 1. General: All wiring shall be installed in raceway. Raceways shall be specified of the type suited for the applications and locations. Raceway shall not be smaller than 16 mm in diameter unless otherwise noted. Provide concealed conduit in all areas except utility spaces.
 - 2. Conduit Installation Schedule: Underground Installations: Rigid Metal Conduit, Intermediate Metal Conduit, or schedule 40 PVC. I or Under Slab on Grade: Rigid Metal Conduit or Intermediate Metal Conduit. Minimum Size: 27 mm diameter.

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3. Outdoor Locations, Above Grade: Rigid Metal Conduit or Intermediate Metal Conduit.
 4. In Slab Above Grade: Rigid Metal Conduit, Intermediate Metal Conduit, Non-Metallic Conduit.
 5. Stub-ups from underground and in-slab locations: Rigid Metal Conduit or Intermediate Metal conduit to a height of 152 mm above grade or finished slab.
 6. Wet and Damp Locations: Rigid Metal Conduit or Intermediate Metal Conduit.
 7. Dry Locations Concealed: Rigid Metal Conduit, Intermediate Metal Conduit, Electrical Metallic Tubing.
 8. Dry Locations Exposed: Rigid Metal Conduit or Intermediate Metal Conduit up to 3660 mm above finish floor. Electrical metallic tubing may be used above 3660 mm above finish floor.
 9. Use conduit bodies to make sharp changes in direction, as around beams.
 10. Provide suitable fittings or methods to accommodate expansion and deflection where conduit crosses seismic, control and expansion joints.
 11. Provide suitable nylon pull string or tape in each empty conduit except sleeves and nipples.
- H. Conductors: General: Conductors shall be copper, Class A or B stranded or solid. Provide building wiring of insulation type THHN or XHHW. Power wiring shall be 12 AWG or larger. Control conductors may be 14 AWG or larger. Provide type XHHW insulation in all locations which may be exposed to temperatures less than 0° C.
- I. Devices
1. All receptacles in office areas shall be served from branch circuit panel boards.
 2. Provide grounding type receptacles of current rating, voltage, phase and configuration as required to serve all equipment.
 3. Provide duplex receptacles to comply with the requirements of the Room Criteria sheets.
 4. No more than six duplex receptacles shall be connected to a single circuit in offices and dormitory area.
 5. No more then two duplex receptacles shall be connected to a single circuit for work and shop areas.
 6. Provide double duplex receptacles with single device plate near each data outlet.
 7. A minimum of one Ground Fault Circuit Interrupter receptacle shall be provided in each restroom, electric room, mechanical room and janitor's closet.
 8. Two 20A double duplex receptacles on 2 dedicated circuits shall be provided at the telephone backboard, in addition to other Communication Room requirements.
 9. Provide weatherproof while in use (using metal covers) Ground Fault Circuit Interrupter protected receptacles on the exterior of the building within 3m of each door. Provide additional receptacles such that no point on the exterior wall is more than 15m from a receptacle.
 10. Receptacles - provide NEMA 5-15R, 5-20R or 5-30R, single or duplex, grounding, back and side wired, receptacles with white finish, UL no. 498 approved, nylon face, brass terminal screws, self-grounding, certified to comply with NEMA WD-1, screw terminal or screw clamp type only. Back wiring shall be clamp-type terminals, which will accept up to #10 wire. Spring clamped type terminations are not acceptable. Provide duplex convenience receptacles with class 3 integral ground fault current interrupter and specific as required for the application.
 11. Snap switches - provide white, NEMA WD-1 15 A, 120 V and 277V ac, back and side wired; back wiring shall be clamp-type terminals, which will accept up to #10 wire. General use snap switch, UL no. 20 listed, self-grounding binding screw-type terminals with white toggle. Screw terminal or screw clamp type only. Spring clamped type terminations are not acceptable. Install switches with off position down.
 12. Provide brushed stainless steel device plates for boxes and devices in interior, finished spaces.
 13. Provide weatherproof while in use metallic covers for exterior receptacles.

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- J. Identification
1. Nameplates: Engraved three-layer laminated plastic, white letters on black background at each electrical distribution and control equipment enclosure and communication cabinets.
 2. Provide engraved device plates with black filled lettering for all receptacles other than NEMA 5-20R and control devices (other than light switches).
 3. Wire Markers: Each conductor at panel board, outlet and junction boxes, and each load connection.
 4. Power and Lighting Circuits: Panelboard and branch circuit or feeder number indicated on drawings.
 5. Control Circuits: Unique control wire number indicated on appropriate shop drawings.
 6. Conduit Markers: Furnish markers for each conduit longer than 3050 mm, spaced 6100 mm on center. A consistent color and text label shall be established for the project.
 7. Underground Warning Tape: Provide detectable tape for all below grade installations.
 8. Label the service and generator room with signage indicating backup power available under automatic start, with no warning.
- K. Exterior Power Distribution
1. Headbolt Heater Outlets: Provide 150 weatherproof headbolt heater outlets with device plates that protect cords and outlets from the weather during use. The headbolt heater outlets provided throughout the parking areas will permit vehicle heaters to be energized for Privately Owned Vehicles (POVs) and Government Owned Vehicles (GOVs). Heater receptacles shall be controlled by a thermostat and the DDC system. Eielson AFB standard headbolt heater assemblies shall be incorporated into the design. Service for the headbolt heater outlets shall be provided via three phase 7200/12470 to 120/208 VAC pad-mounted transformer(s) and distribution panelboards.
- L. Coordinated Power System Protection
1. General: Provide power system coordination study as outlined in UFC 3-550-01.
 2. Prepare and submit an analysis demonstrating that the equipment and system constructed meets the specific requirements for equipment ratings, coordination, and protection. The analysis shall include a fault current analysis and protective device coordination study. Protective devices shall be based on the recommendations of this study.
 3. The fault current analysis, and protective device coordination study shall begin at the generator source bus and extend through panelboards, loadcenters, feeder and branch circuit wiring.
 4. A single line diagram shall be prepared to show the electrical system buses, devices, transformation points, and all sources of fault current (including motor contributions). Locations of switches, breakers, and circuit interrupting devices shall be shown on the diagram together with available fault data, and the device interrupting rating.
 5. Coordination Study shall demonstrate that the maximum possible degree of selectivity has been obtained between devices specified, consistent with protection of equipment and conductors from damage from overloads and fault conditions.
- M. Grounding
1. General, Grounding Systems: All grounding systems, building materials conductive but not current carrying shall be interconnected and tied to the building service ground. A communications grounding system for the CER and related equipment shall be provided. The communications grounding system shall be connected to grounding busbars and equipment racks in the CER. The communications grounding system shall remain separate of the building's power grounding system except where bonded to the single main electrical service ground point.
 2. Provide a grounding system in accordance with AFI 32-1065, MIL-HDBK-419A, MIL-HDBK-1857 and NEC Article 250.
 3. Provide insulated grounding conductors, sized per NEC requirements, in all secondary, distribution, feeder and branch circuit conduits.

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4. Provide a building grounding electrode system consisting of a ground ring, metal underground water pipe, building structural steel, concrete encased electrodes, and copper clad steel rod electrodes.
- N. Lightning/Transient Protection System
1. No building lightning protection system is required.
 2. Protect all incoming communications lines from lightning and transient voltage surges.
 3. Protect the Fire Alarm remote transceiver from lightning and transient voltage surges.
- O. Telecommunication Outside Plant
1. Communication Duct Banks: Provide three aggregate bedded 102 mm PVC Schedule 80 conduits with four, 25 mm innerducts from the CER of the new facility to CITS manhole # 2-4 near the corner of Central and Davis. A road crossing is required under Central Ave. Provide two aggregate bedded 102 mm PVC Schedule 80 conduits with four, 25 mm innerducts from the CER of the new facility to CITS manhole # 4-4 near the corner of Flightline and Division. A road crossing is required under Wabash Ave and the back driveway of building 3180.
 2. Copper service: Provide One 100 pair, 24 AWG copper cable from the new building routed in one of the 102 mm duct and terminated directly on the telephone frame in building 3180. Provide one 600 pair, 24 AWG copper cable from the new building routed in one of the 102 mm duct to be terminated directly on the telephone frame in building 3110. Reference ETL 02-12.
 3. Fiber Optic Service: Provide 12-strand single mode fiber cables routed in innerduct in one of the 102 mm ducts from the new building, to building 3112 and 3180. Fiber optic cables shall be terminated with SC type connectors and placed in an existing rack mounted fiber optic cabinet. All fiber optic cable splices, terminations, and materials shall be provided under this contract. Fiber optic cable is to be tested with an optical time domain reflectometer (OTDR) and printed results are to be submitted to the Communications Flight personnel.
- P. Interior Telecommunications
1. General: Telephone and Data Systems outlets, cabling and terminations shall be installed in all rooms as indicated in the room criteria sheets and as required by ETL 02-12. All equipment, cabling and terminations shall meet Category 6 rating for Voice and Data. The system shall be in compliance with EIA/TIA criteria with all terminations labeled and identified. All installers must be manufacturer certified. The PBX, active LAN components (hubs, routers, bridges, modems, etc.) and computer systems will be procured and installed by the government.
 2. Communications Equipment Room Requirements: ETL 02-12 should be referenced for room layout. The room shall be constructed to provide a minimum 914 mm feet of clearance behind and in front of equipment racks. 19 mm ACX finished plywood shall be provided on two walls for the Telephone/Data Terminal Board (T/DTB). A #6 AWG solid copper ground wire shall be furnished and installed in this room and extended to the main service building ground through a 19 mm diameter conduit. No workstation shall be further than 90 meters from this room. Duplex receptacles shall be provided at 1829 mm center-to-center spacing around the room's interior as well as others located adjacent to, and directly on racks for dedicated equipment connection. Space allocation shall be made for dedicated SIPRNET (classified) data distribution racks.
 3. Communications Distribution: A cable tray system shall be provided for all Category 6 telephone/data and CCTV cables. All cables shall be provided with insulation systems listed for installation in air plenums without the requirement for containment in raceways. Cables shall be tested and results are to be submitted to Communications Flight personnel. The tray system shall be distributed throughout the facility for use in routing communications/data and CCTV cables. Cable trays shall be installed above suspended ceilings in the office areas. Where required for additional communications rooms or racks shall be interconnected with a fiber backbone. The tray system shall terminate in

SECTION 01010 DESIGN REQUIREMENTS

the CER. 19 mm diameter conduits shall be stubbed up from combination telephone/data outlets at all workstation locations into the accessible ceiling above. Use only long radius elbows. Conduit bodies are not permitted in telecom/data wiring. Provide home run from telephone and data outlets, through conduits to the cable tray to 483 mm racks or conduit directly to racks. Provide plastic bushings on all conduit terminations. Minimum box size for outlets: 119 mm square x 54 mm deep. All communication cables shall terminate on patch panels located in and equipment rack, per ETL 02-12. SIPRNET (classified) distribution shall be of the alarmed (vs: the exposed and directly inspectable type) and shall meet PDS (Protected Distribution Systems) requirements.

4. Data Systems Distribution: Floor mounted, 2134 mm data and cable management racks shall be located in the CER. Category 6, 48 port, standard patch panels shall be mounted as required in the rack. The patch panels shall have wire termination on one side and RJ-45 non-keyed ports on the other. Terminal block bodies shall be constructed of a molded, impact resistant, self-extinguishing, plastic housing. The patch panels shall be in full compliance with Category 6 requirements. Mount patch panels in the equipment rack, with wire management panels. There shall be a minimum of 914 mm of clearance behind and in front of equipment racks. Equipment must be sized according to the number of jacks + 20% to allow for future expansion. Two 4 pair, category 6, 24 AWG, plenum rated cables shall be run continuously from the patch panels to the station receptacles. All cables shall be terminated on RJ-45 (configured for EIA/TIA 568-A wiring) non-keyed type computer jacks. Computer jacks shall meet or exceed the transmission requirements for connecting hardware specified in EIA/TIA TSB-40 Category 6. Jacks shall terminate in a standard outlet box. Openings for the telephone jack and computer jack shall be designed to accept snap-in type modular jacks. All cables shall be tested and the test results submitted to Communications Flight personnel.
5. Telecommunications (Voice) System Distribution: The telecommunications (Voice) system distribution shall meet the same requirements as the data systems distribution. Telephone and data cable must not be intermingled: provide separate patch panels for each.
6. Telecommunications Outlet Configuration: 2 data (Category 6) and 2 telephone jacks per combination outlet, unless otherwise noted.
7. Grounding: Shall be per EIA/TIA requirements/guidelines.

Q. Special Systems

1. Public Address System: Provide a public address system and locate in the CERs. The system may include, but will not be limited to; amplifier, mixer microphones, remote consoles, speakers, matching transformers, volume controls, conduit, cables and outlets. The final system shall be complete and operational, including all accessories. Separate users in the facility will require zoning within the functional areas.
2. Mass Notification System (MNS): Contractor shall provide a Mass Notification System (MNS) for the new facility. The MNS shall provide real-time information to all building occupants in all indoor areas and to personnel in the immediate vicinity of the building during emergency situations. The system shall be designed in accordance with UFC 4-021-01 and meet all its requirements. The system shall consist, as a minimum, of:
 - a) Autonomous Control Unit - to monitor and control the notification appliance network
 - b) Local operator console - to deliver pre-recorded and live messages and instructions
 - c) Notification Appliance Network - to provide instructions at all locations in and around the building. Include strobes for hearing impaired occupants.
 - d) An uninterruptible power supply (UPS) - for operation during outages
 - e) Interface with the building fire alarm system to temporarily deactivate audible fire alarm appliances
 - f) Supervised wiring
 - g) Capability to be connected to a base-wide control system at a later date.

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3. Closed Circuit Television (Warrior Programming): Provide a conduit system, cable and connectors for a CCTV system. The system shall be routed from the CER to the conference room(s). CCTV source video via antenna mounted on building. Antenna to be supplied by government. Conduit will be provided to antenna location. Video connectors shall be style F. System components will be procured and installed by the government. System components may include but are not limited to; splitters, taps, monitors, and other head end equipment.
4. Security Video: Provide security video monitoring systems. There shall be separate systems for the ANG (Air National Guard) and enlisted (Active Duty). Security cameras shall be located throughout the building's core area, interview rooms, all Arctic Entries, the main access gate, Armory Vault doors and the AD Control Center door. Exterior camera coverage shall provide 360 degree coverage of the building's perimeter. The system shall have a minimum 20 camera capacity. The video system will require digital recording capability. Main control and monitoring of the security video system shall be from the AD Control Center. Secondary control and monitoring shall be from the ANG Security Control. Primary control and monitoring of the exterior cameras shall be by the enlisted AD (Active Duty) side. There shall be security cameras to monitor the Armory Vault doors that may be controlled and monitored from the control rooms and from inside of the vaults. There shall be a security camera in the Lobby to monitor the door to the ANG wing of the facility that may be controlled and monitored from the control rooms and the ANG Administration Office. Additional video inputs from remote base locations will also be monitored at the control room. System components may include but are not limited to; conduit, junction boxes, cable, cameras, monitors, video recorders and other head end equipment. Security video system components to be government provided and installed. The system components for the remote base locations will also be provided and installed by the government. 19 mm diameter conduit with cable shall be run from each camera location to control and monitor locations as required. The raceway system shall be complete and separate from all other systems. The final system shall be complete and operational, including all accessories.
5. Security System: A security alarm system is required. Control and notification shall be from the main control room. The alarm system shall be compatible with the base alarm system. The system shall comply with DOD and USAF security alarm requirements including AFI 31-209, Chapter 5.2 and the DOD 5100 76-M 31 Series Handbook. An Uninterruptible Power Supply (UPS) shall be provided and protected. Security system should cover exterior perimeter entries and other areas as noted. System components may include but are not limited to; conduit, junction boxes, cable, motion sensors, magnetic contacts, control panels and other head end equipment. The final system shall be complete and operational, including all accessories.
6. Armory Security System: Provide alarm system for each Armory. No alarm on vault door is required. Armories shall have a minimum of two layers of security. A duress pushbutton is required inside of the Armory.
7. AD Evidence Room Security: Provide alarm contact switch with alarm notification at the main control room.
8. Secured access control from the Lobby into the ANG Wing of the facility terminating at ANG Administration Office.
9. Classroom Projection System: Provide necessary conduit, cabling, power and data connections for a ceiling mounted projection system with a concealed motorized projection screen in the main classroom.

2.7.5 Testing

- A. A proposed field test plan including the test safety plan shall be prepared based on the Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems developed by the International Electrical Testing Association, Inc. (NETA). Submit the plan 30 days prior to testing the installed equipment or systems. The test plan shall consist of complete field test procedures including tests to be performed, test equipment required, and tolerance

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limits. Field-testing shall be performed in the presence of the Contracting Officer. The Contractor shall notify the Contracting Officer 7 days prior to conducting tests. The Contractor shall perform all tests and inspections recommended by the manufacturers unless specifically waived by the Contracting Officer. The Contractor shall maintain a written record of all tests, which includes date, test performed, personnel involved, devices tested, serial number and name of test equipment, and test results. Field test reports shall be signed and dated by the Contractor.

- B. Measure and record lighting levels after installation to insure that the lighting levels are within the recommended levels and meet the allowable ratio guidelines per I.E.S and USAF Technical Instruction 811-16. Provide tabulation comparing actual lighting levels with calculated (1.0 LLD) levels demonstrating that the end of service levels shall remain within the above guidelines.
- C. Ground Resistance Tests shall be measured using the fall-of-potential method defined in IEEE Std. 81. Ground resistance measurements for electrical distribution and signal reference ground shall be made before the electrical distribution system is energized and shall be made in normally dry conditions not less than 48 hours after the last rainfall. Make resistance measurements of separate grounding electrodes before the systems are bonded together. The combined resistance of separate systems may be used to meet the required resistance, but the specified number of electrodes must still be provided.
- D. Medium-Voltage Cable shall be field tested and inspected in accordance with NETA ATS. Perform field inspections and tests listed in NETA ATS, Section 7.3.3.
- E. Low-Voltage Cable Tests: Low-voltage feeder cable, complete with splices, shall be tested for insulation resistance after the cables are installed, in their final configuration, ready for connection to the equipment, and prior to energization. The test voltage shall be 500 volts dc, applied for one minute between each conductor and ground and between all possible combination conductors in the same trench, duct, or cable, with all other conductors in the same trench, duct, or conduct. Perform megger tests prior to installing cable and immediately after pulling.
- F. Transformer Tests
 - 1. The following field tests shall be performed on all transformers. Pass-fail criteria shall be in accordance with transformer manufacturer's specifications and in compliance with ANSI and NEMA standard:
 - a) Insulation resistance test phase-to-ground.
 - b) Turns ratio test.
 - c) Correct phase sequence.
 - d) Correct operation of tap changer.
- G. Telephone/Data Wiring Tests: All circuits shall be tested using a test set that meets the Class II accuracy requirements of EIA/TIA TSB 67 and 95. Testing shall use the Basic Link Test procedure of EIA/TIA TSB 67 and 95.
- H. Generator System Test
 - 1. Provide a load test on the generator for a minimum of 2 hours at 10% load, 4 hours at 50% load and 8 hours a 100% load. Provide full load test using a load bank, and building load.
 - 2. Record in 20 minute intervals during four hour test:
 - a) Kilowatts
 - b) Amperes
 - c) Voltage
 - d) Coolant temperature

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- e) Room temperature
- f) Frequency
- g) Oil pressure

- I. Test alarm and shutdown circuits by simulating conditions.

2.7.6 Seismic Protection

- A. All electrical fixtures, conduits and equipment shall be seismically braced. Provide all necessary steel, hardware, devices and factory-manufactured components required for seismic protection of all electrical equipment furnished under this contract, such as transformers, generators, supporting pads, light fixtures, etc.
- B. Provide snubbers and flexible bracing as required for vibration isolation and earthquake protection. Use preferred factory-furnished equipment and devices to the extent feasible.

2.7.7 Seismic Design Criteria

- A. Design bracing and snubbers in accordance with Corps of Engineers Guide Specifications, Section 16070, "Seismic Protection for Electrical Equipment". In particular, follow TI 809-4, "Seismic Design for Buildings," referenced in the stated document. The design shall also comply with AFM 88-3.
- B. Follow manufacturer's recommendations in selecting all factory-furnished devices.
- C. Submit an analysis of all required seismic control for evaluation and approval, as relating to electrical equipment.

2.7.8 Prohibited Materials

- A. The following items are prohibited from this project and will not be allowed:
 - 1. Type AC, MC, NM, NMS, NMC wire
 - 2. U-tube fluorescent lamps
 - 3. Exterior floodlights
 - 4. Plastic boxes

2.7.9 Electrical Operating and Maintenance Data

- A. Provide operating and maintenance data in accordance with section 2.6.7 "Operating and Maintenance Data" for the emergency generator and the special systems described in section 2.7.4.Q

SECTION 01010 DESIGN REQUIREMENTS**PART 2 MINIMUM DESIGN CRITERIA****2.8 FIRE PROTECTION DESIGN CRITERIA****2.8.1 References**

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. Note: If dates are not given for reference standards or criteria, the latest edition is to be used.
- B. Design and Construction shall be in accordance with the following codes, standards, and regulations, latest adopted edition. The most stringent criteria shall govern when discrepancies occur.
 - 1. ANSI S3.41 Audible Emergency Evacuation Signals
 - 2. International Building Code (IBC)
 - 3. International Fire Code (IFC)
 - 4. NFPA 101, Life Safety Code
 - 5. NFPA 13, Installation of Sprinkler Systems
 - 6. NFPA 1963 Fire Hose Connections
 - 7. NFPA 20, Installation of Centrifugal Fire Pumps
 - 8. NFPA 22, Water Storage Tanks
 - 9. NFPA 24, Installation of Private Fire Service Mains and Their Appurtenances
 - 10. NFPA 70, National Electrical Code
 - 11. NFPA 72, National Fire Alarm Code
 - 12. TI 809-04, Seismic Design for Buildings
 - 13. UFC 3-600-01 Fire Protection Engineering for Facilities. Requirements of this handbook shall govern over other standards for fire protection and life safety.
 - 14. UFGS 13851A, Fire Detection and Alarm System Addressable
 - 15. Underwriters' Laboratories, Inc. (U.L.). All equipment shall bear the UL label, or equivalent, from a nationally recognized testing agency, acceptable to the authority having jurisdiction.

2.8.2 Fire Protection Sprinkler System

- A. Design Criteria
 - 1. The fire protection systems shall be a combination of wet, dry, and preaction systems in accordance with UFC 3-600-01, based on the hazard classification, occupancy, area, etc. Sprinkler systems shall be provided in all areas of the building. All areas subject to outside ambient temperature shall have a dry sprinkler system. As a minimum, all areas (rooms) with overhead doors shall be equipped with dry sprinkler systems. The contractor shall comply with all the requirements listed in UFC 3-600-01. The exterior hose flow is 31.54 L/s.
 - 2. The fire protection systems shall be hydraulically designed. Hydraulic calculations shall be in accordance with the Area/Density method of NFPA 13.
 - 3. The fire protection systems shall be designed by a qualified fire protection engineer who is experienced in the design of similar facilities. The systems shall be installed by a firm that specializes and is experienced in the installation of these systems. The engineer's professional seal shall appear on all calculations and shop drawings.

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4. A single electric driven air compressor shall be provided to maintain dry system air pressure. Sprinkler system installer shall provide separate 25 mm shop compressed air line from shop air system to the dry pipe system compressed air connection point. The shop air system line shall serve as an auxiliary backup and rapid air fill provision, and shall not be relied on for routine pressure maintenance. The shop air connection shall be equipped with an adjustable air pressure regulator, check valve and isolation valve. Comply with NFPA 20, NFPA 24 and UFC 3-600-01 and UFGS Section 13935, "Dry Pipe Systems" requirements. Refer to the Civil section of the specifications for potential water supply sources.
5. Submit all calculations and layout drawings for review and approval, prior to construction.
6. Provide Operating and Maintenance manuals for all components of the fire protection system.
7. All sprinkler piping and appurtenances shall be seismically braced. Provide all necessary steel, hardware, devices and factory-manufactured components required for seismic protection of all fire protection equipment furnished under this contract. Design bracing and snubbers in accordance with Corps of Engineers Guide Specifications, Section 15070, "Seismic Protection For Mechanical Equipment." In particular, follow TI 809-04, "Seismic Design for Buildings," referenced in the stated document. The design shall also comply with AFM 88-3 and NFPA 13. Follow manufacturer's recommendations in selecting all factory-furnished devices. Submit an analysis of all required seismic control for evaluation and approval, as relating to mechanical equipment.

2.8.3 Materials:

- A. Piping and valves shall comply with NFPA 13. All equipment and components shall bear UL or FM label or marking.
- B. Piping: Schedule 40 black steel only, welded, threaded, or with grooved joint couplings. Dry-pipe system piping shall be the same except galvanized pipe and galvanized fittings.
- C. Valves:
 1. Gate: OS&Y, iron body, bronze trim, flanged, 1,200 kPa WOG.
 2. Check: Iron body, swing check, bronze disc and trim, flanged 1,200 kPa WOG.

2.8.4 Minimum Basic Requirements

- A. Locate fire department connections with sufficient clearance from walls, obstructions, to allow full swing of fire department wrench handle.
- B. Provide fire department Siamese pumper connections.
- C. The sprinkler system components shall be accessible without damage or modification to the component. Components of the sprinkler system subject to maintenance, annual testing, and repair shall be maintainable, accessible and repairable by locally available service organization personnel.
- D. Fire sprinkler piping shall be routed, distributed and concealed above the suspended ceiling with recessed chrome plated heads and white escutcheons. Sprinkler piping in mechanical, electrical rooms and fan room mezzanines shall be exposed with upright sprinklers.
- E. Center heads in two directions in ceiling tile and provide piping offsets as required.
- F. Protect base water supply at the connection of the fire sprinkler water storage system with a double check valve, backflow prevention device per AFR 91-13.

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- G. Sprinkler heads installed in finished spaces shall be recessed type.
 - H. Water motor alarms shall not be used. All sprinkler system alarms shall be electrically powered.
 - I. The sprinkler system piping and sprinkler head locations shall be coordinated and be compatible with ceiling types, light fixtures, HVAC air diffusers, HVAC ducts and structural members. The location of all heads and the routing of all piping shall be subject to the approval of the Contracting Officer.
 - J. Provide snubbers and flexible bracing as required for vibration isolation and earthquake protection. Use factory-furnished equipment and devices to the extent feasible.
- 2.8.5 Fire Alarm System
- A. Compliance
 1. The fire detection and alarm system and the central reporting system shall be configured and tested in accordance with NFPA 72 and UFC 3-600-01, and shall be specified using UFGS 13851A. The equipment furnished shall be compatible and be UL listed, FM approved, or listed by a nationally recognized testing laboratory in accordance with the applicable NFPA standards. The fire alarm system shall be able to communicate via addressable zones/devices with remote central fire reporting station by radio.
 2. System Requirements
 - a) Fire alarm system shall be fully addressable up to each individual device and designed to accommodate the entire facility. The fire alarm system and devices shall be the addressable type. The raceway system shall be complete and separate from all other systems. The system shall include connections for at least 8 additional zones and provisions for the addition of future zones.
 - b) Field Devices: Detection devices shall include area smoke, heat and duct smoke detectors. Detection devices shall be provided in all areas required by applicable codes and standards and as required by Eielson AFB Fire Marshal and base requirements. Detection devices when required shall also be provided below all raised floors. Manual pull stations shall be provided where required. The pull stations shall be non-glass break type and not require the use of a key to reset. Alarm signaling devices shall include interior and exterior horn/strobes. A remote annunciator (type to be verified with the BCE) shall be provided in the main entry. Supervisory devices including tamper and flow switches for the building sprinkler system shall be provided as required. Duct detectors located in concealed locations shall provide remote annunciation and test switch. A radio Transmitter and antenna shall be provided to communicate to the base receiver at the central station at 139.675 MHz - Narrowband. Fire detection reporting system shall be via radio transceiver and be able to communicate with the central fire station by zone. Radio Transmitter/Antenna by Monaco.
Fire dampers shall be provided as required in ductwork and air handler shutdown shall be provided as required. Fire rated doors and windows shall be released or closed as required.
 - c) Device mounting heights shall be in accordance with ADA Accessibility Guidelines for Building and Facilities requirements.
- 2.8.6 Training
- A. Training course shall be provided for the operations and maintenance staff. The course shall be conducted in the building where the system is installed or as designated by the Contracting Officer. The training period for systems operation shall consist of 1 training days (8 hours per day) and shall start after the system is functionally completed but prior to final acceptance tests.

SECTION 01010 DESIGN REQUIREMENTS

The training period for systems maintenance shall consist of 1 training days (8 hours per day) and shall start after the system is functionally completed but prior to final acceptance tests. The instructions shall cover items contained in the operating and maintenance instructions. In addition, training shall be provided on performance of expansions or modifications to the fire detection and alarm system.

2.8.7 Execution

- A. All work shall be performed in a professional and craftsman-like manner.

2.8.8 Warranty

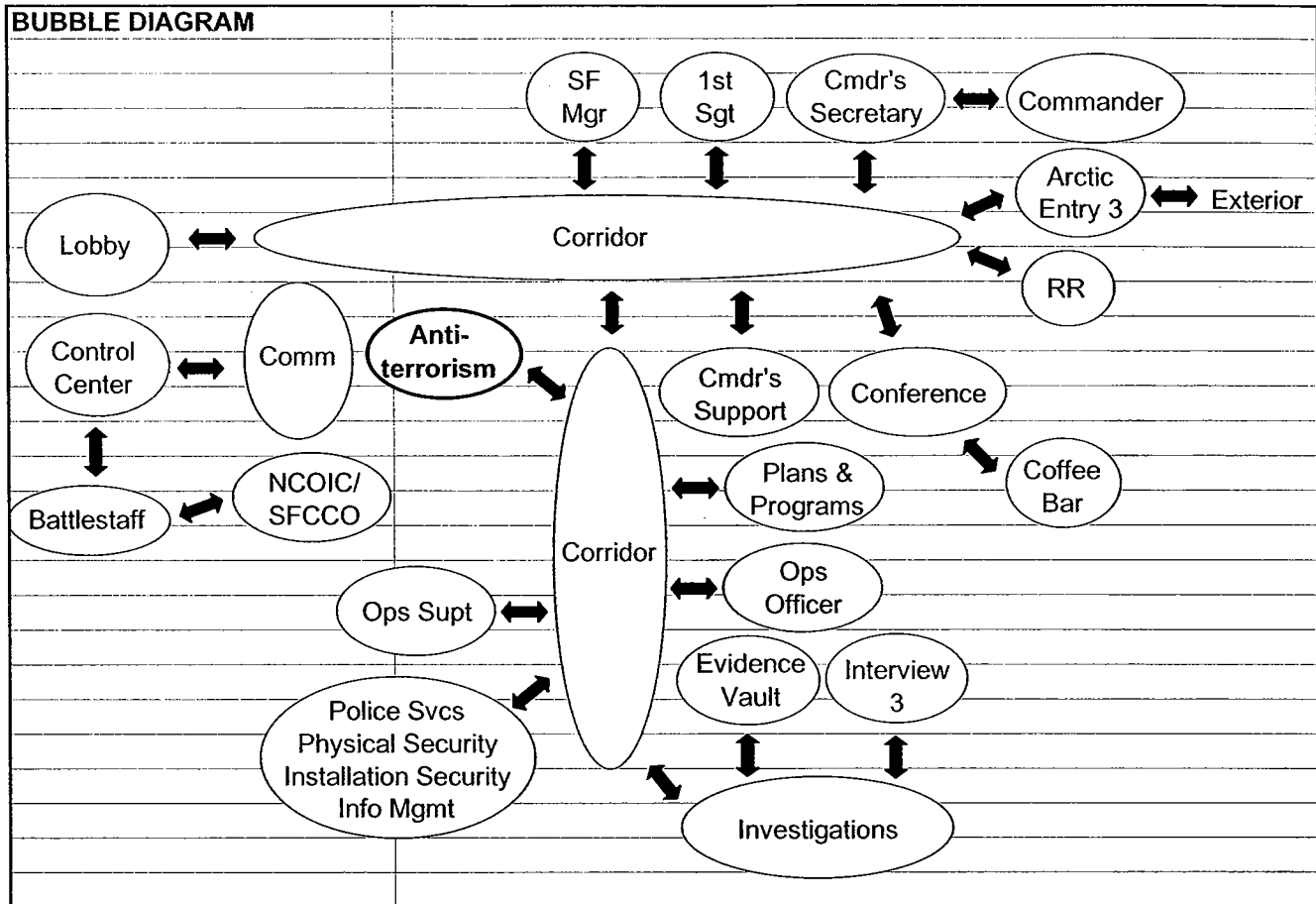
- A. Industry standard warranties for products used in construction shall apply. The government's contracting officer must approve deviation from manufacturer's required installation instructions or intended application, which will void a warranty, in writing.

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - ANTITERRORISM

ROOM NAME	AD ANTITERRORISM OFFICER'S OFFICE
Function	Office space for (1) person and (1) transient
Adjacencies	Part of Command staff group but only required to be near Command staff group (Commander, Cmdr's Secretary, Cmdr's Support Staff, Conference, Coffee Bar, 1st Sgt, SF Mgr); near Ops Security group (Investigations Section, NCOIC/SFCCO, Ops Officer, Ops Supt, Plans & Programs, Police Services); near Control Center
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STE phone; CFCI: (2) voice ports; (1) SIPR net port; (2) non-secure LAN ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: security access control/alarm
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows required
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

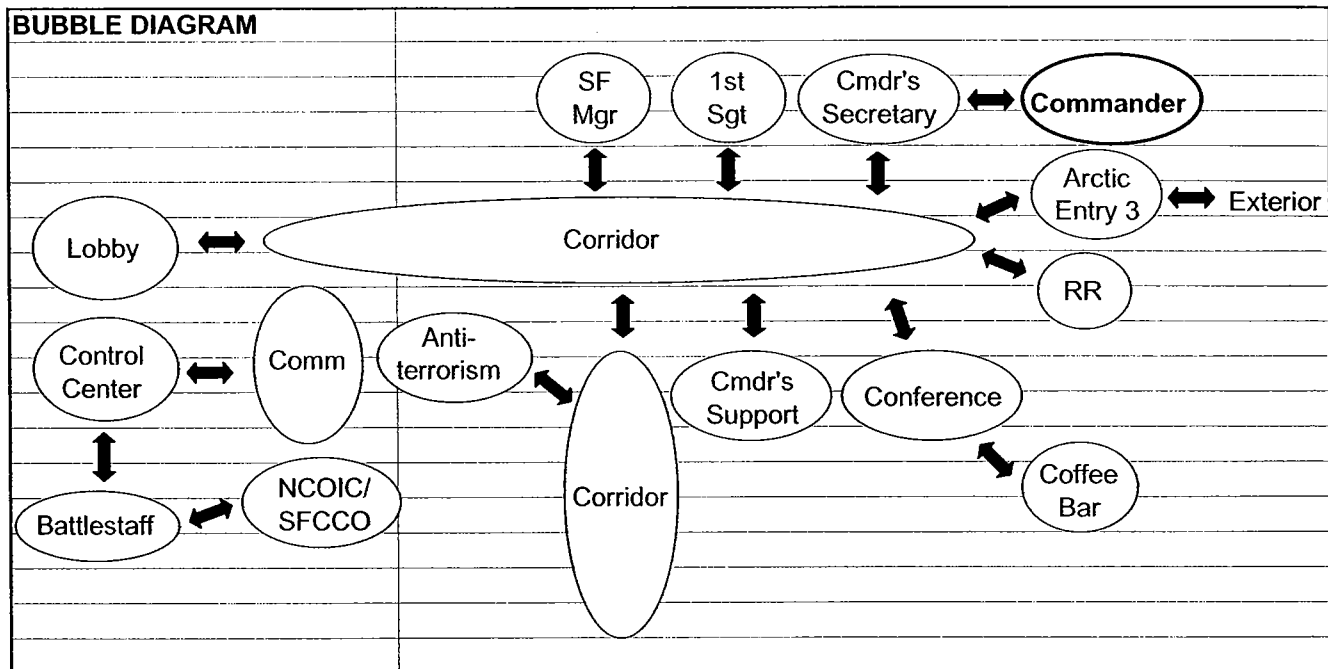
ROOM CRITERIA SHEETS
AD CMD - ANTITERRORISM

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - COMMANDER

ROOM NAME	AD COMMANDER'S OFFICE
Function	Office space for Commander and small meetings
Adjacencies	Command Staff (Cmdr's Secretary, Cmdr's Support Staff, Conference, Coffee Bar, 1st Sgt, SF Mgr); direct access to Cmdr's Secretary; near Anti-Terrorism, Arctic Entry 3, Battlestaff, Control Center, private restroom; no pass-through circulation of other building occupants through Command staff area; far from Reports & Analysis/Info Mgmt
Area	20.4 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STE phone; CFCI: (2) voice ports; (1) SIPR net port; (2) non-secure LAN ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	CFCI: built-in wall cabinet behind CC desk with bottom 1/3 storage and clothes closet on one side for hanging garments
Casework	None
Security	GFGI: security access control/alarm
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) work stations with seating for (2) guests at each work station; (8) person conference table and chairs
Acoustical	Minimum STC 52 to adjacent spaces; isolate from loud spaces such as CATS and Open Ranks
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and Cmdr's Secretary; glazed panel in door with "354th Security Forces Squadron Commander" etched in glass; office function lockset; sound gasketting
Window	Operable windows required
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - COMMANDER

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

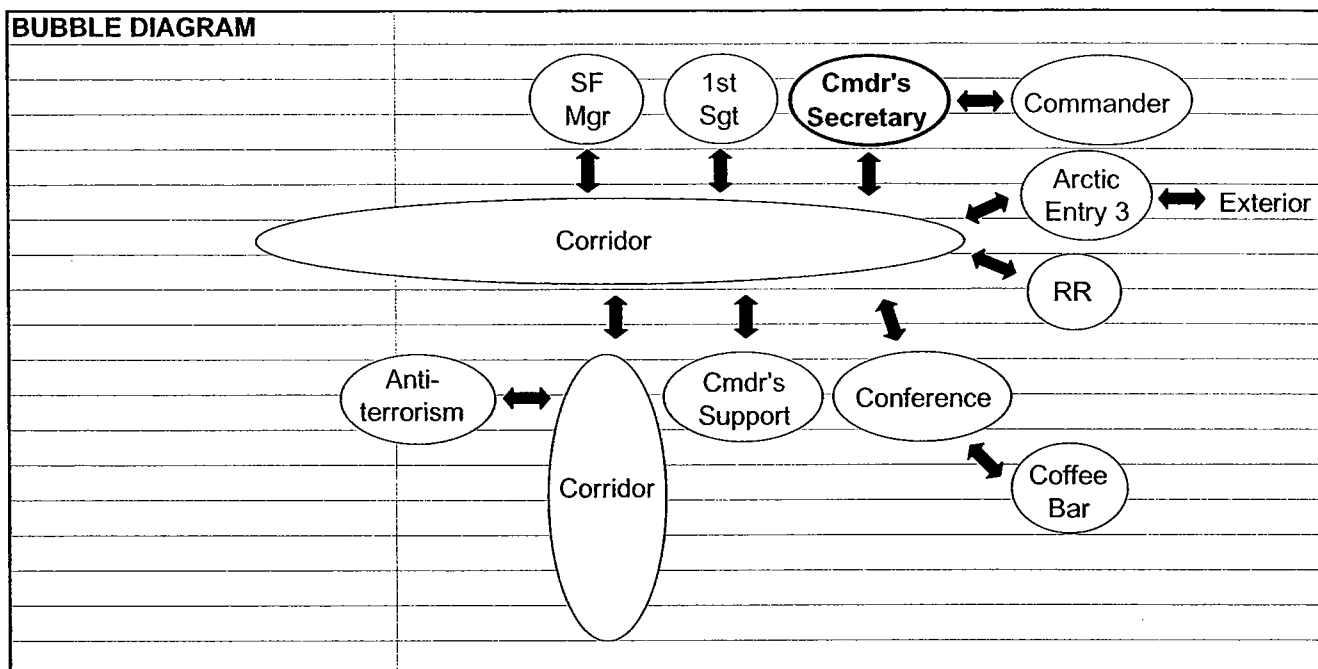
ROOM CRITERIA SHEETS
AD CMD - CMDR'S SECRETARY

ROOM NAME	AD COMMANDER'S SECRETARY'S OFFICE
Function	Open office space for (1) person; utilized for combined support for Commander, 1st Sgt, Security Forces Mgr; reception area for Commander's guests
Adjacencies	Direct access to Cmdr; Command staff (Commander, Cmdr's Support Staff, Conference, Coffee Bar, 1st Sgt, SF Mgr); near Anti-Terrorism, Arctic Entry 3, private restroom; open to Corridor
Area	18.6 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; seating for minimum of (5) guests
Acoustical	None
Life Safety	None
Door	None
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - CMDR'S SECRETARY

BUBBLE DIAGRAM

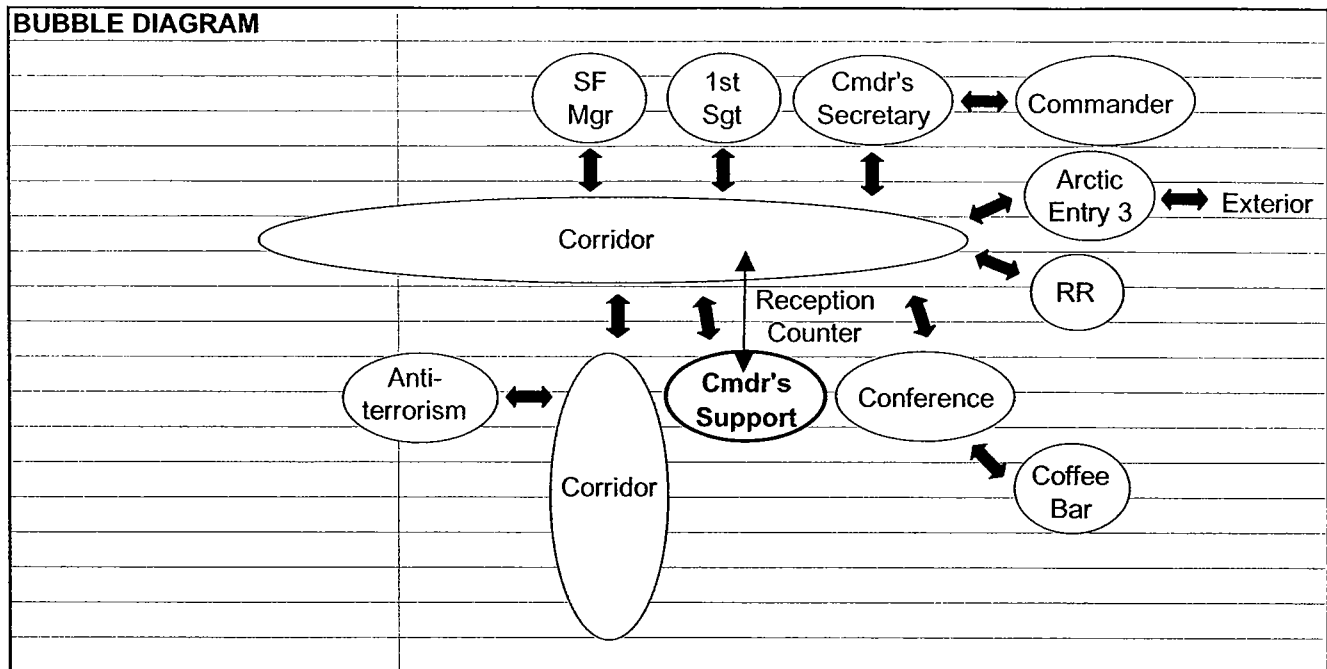


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - CMDR'S SUPPORT STAFF

ROOM NAME	AD COMMANDER'S SUPPORT STAFF
Function	Office space for (4) people; utilized for reception; management and administration of personnel; weight monitoring and record-keeping for personnel
Adjacencies	Command Staff (Commander, Cmdr's Secretary, Conference, Coffee Bar, 1st Sgt, Security Forces Mgr); near Anti-Terrorism
Area	41.8 SM
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: file cabinets; secure storage
Casework	None
Security	None
Equipment	GFGI: floor scale; (4) computers
Furnishings	GFGI: (4) work stations; systems furniture reception counter open to Corridor
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - CMDR'S SUPPORT STAFF

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

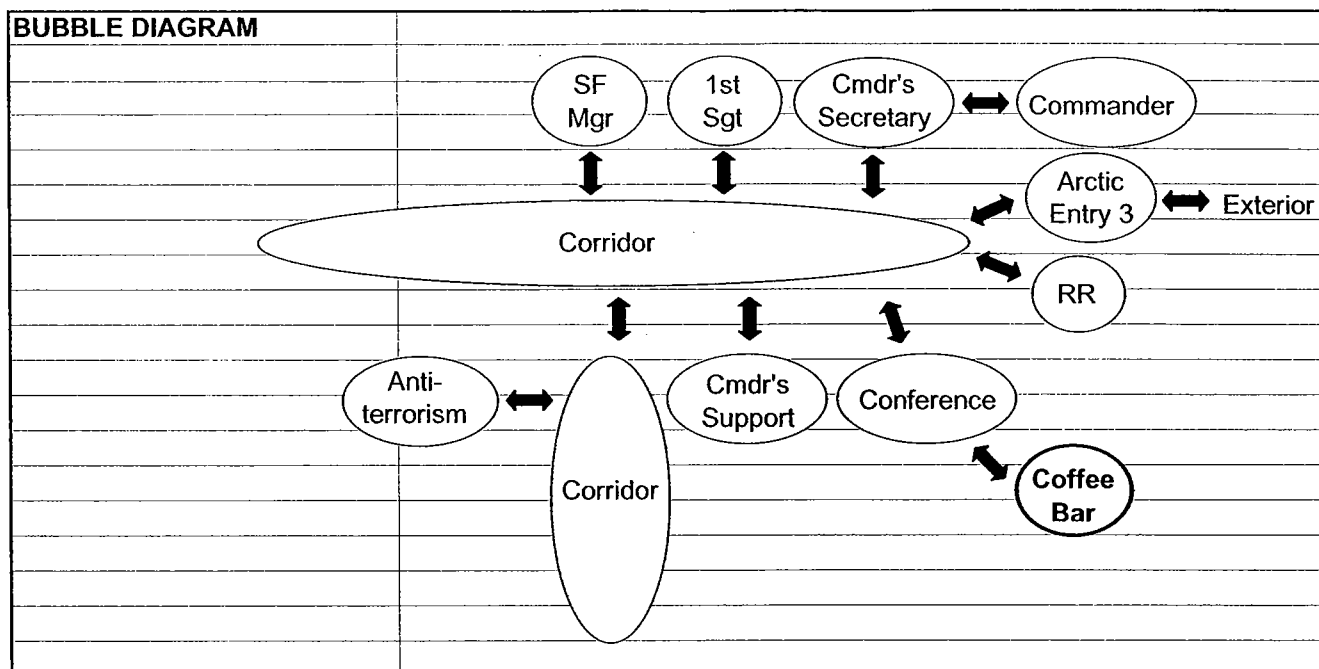
ROOM CRITERIA SHEETS
AD CMD - COFFEE BAR

ROOM NAME	AD COFFEE BAR
Function	Coffee service to Conference Room
Adjacencies	Contiguous with Conference Room
Area	2.2 SM
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	(3) duplex receptacles above counter and one additional receptacle on each wall
Lighting	Recessed fluorescent; under-cabinet lighting
Telecommunication	(1) voice port
Data	(1) data port
Plumbing	Single basin sink with gooseneck faucet and instant hot water generator with countertop spigot; refrigerator water line for ice maker hookup
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface countertop and cabinet; garbage receptacle in base cabinet; room for upright refrigerator
Security	None
Equipment	GFGI: coffee machine; upright refrigerator with ice maker
Furnishings	None
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	None
Window	None
FINISHES	
Floor	Carpet with ceramic tile at wet area
Base	Oak
Walls	Painted GWB; oak chair rail moulding at 914.4 mm; ceramic wall tile at wet area
Ceiling	Suspended acoustical panel
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - COFFEE BAR

BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

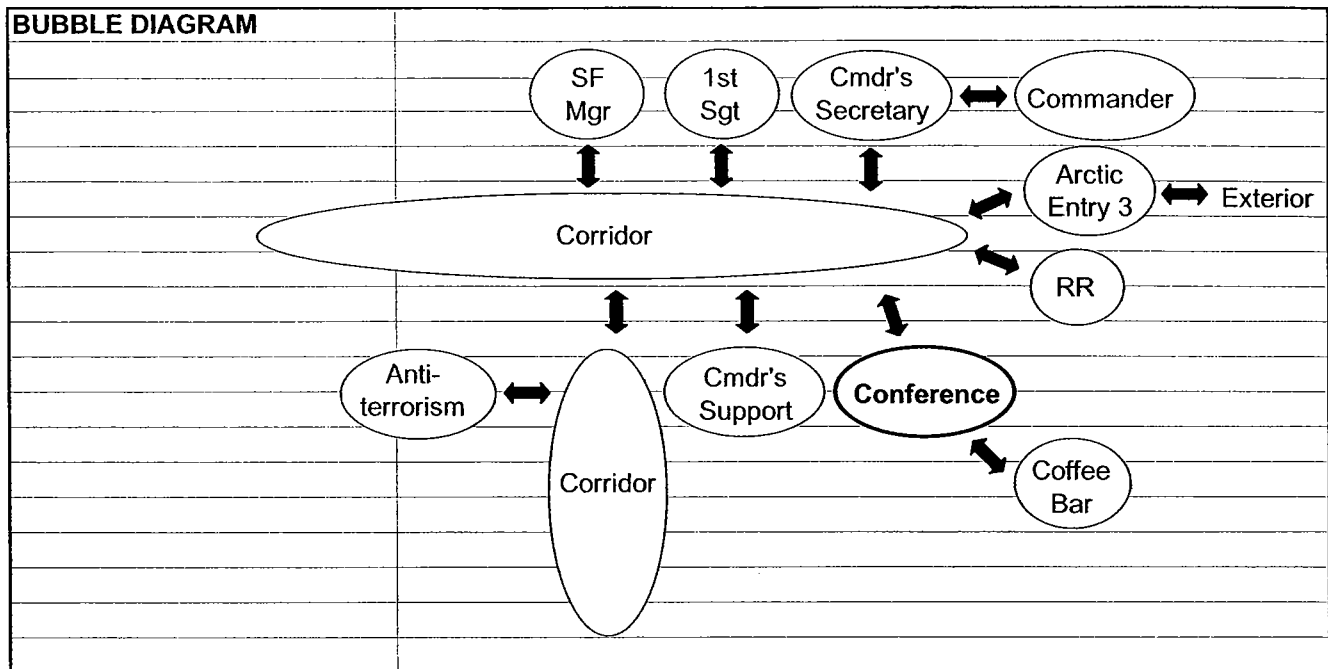
ROOM CRITERIA SHEETS
AD CMD - CONFERENCE

ROOM NAME	AD CONFERENCE ROOM
Function	Space for (40) person conferencing [(20) at table, (20) along walls]
Adjacencies	Command Staff (Commander, Cmdr's Secretary, Cmdr's Support Staff, Coffee Bar, 1st Sgt, Security Forces Mgr); near Anti-Terrorism, private restroom
Area	40.9 SM
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Direct/indirect pendant fluorescent with multi-level switching; compact fluorescent task/accent lighting; dimmer switch for lighting with fan control switch
Telecommunication/Data	(3) voice ports - wall; (2) voice ports - floor; (3) data ports - wall; (2) data ports - floor; (1) data port - ceiling; (1) data port - podium with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	CFCI: concealed motorized projection screen; GFGI: ceiling mounted video projection system; computer ; 914.4 mm x 1524 mm dry erase board
Furnishings	GFGI: (20) person conference table; (40) chairs; podium
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Oak
Walls	Painted GWB; oak chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - CONFERENCE

BUBBLE DIAGRAM

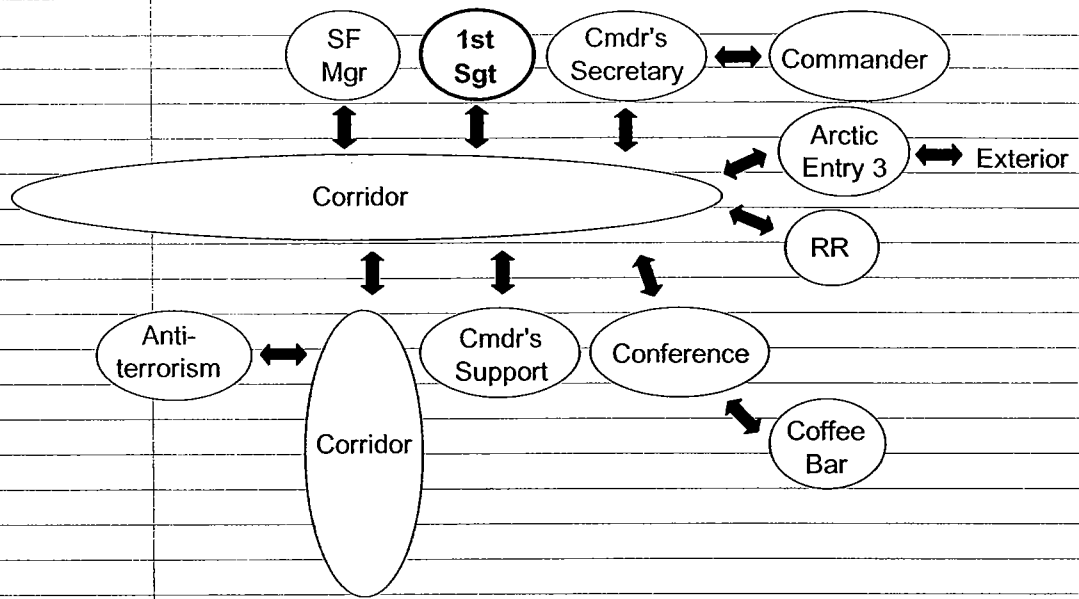


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - 1st SGT

ROOM NAME	AD FIRST SERGEANT'S OFFICE
Function	Office space for supervisor of unit personnel; counseling
Adjacencies	Command Staff (Commander, Cmdr's Secretary, Cmdr's Support Staff, Conference, Coffee Bar, Security Forces Mgr); near Anti-Terrorism
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; (2) guest chairs; (2) person couch
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door with "1st Sergeant" etched in glass; office function lockset; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

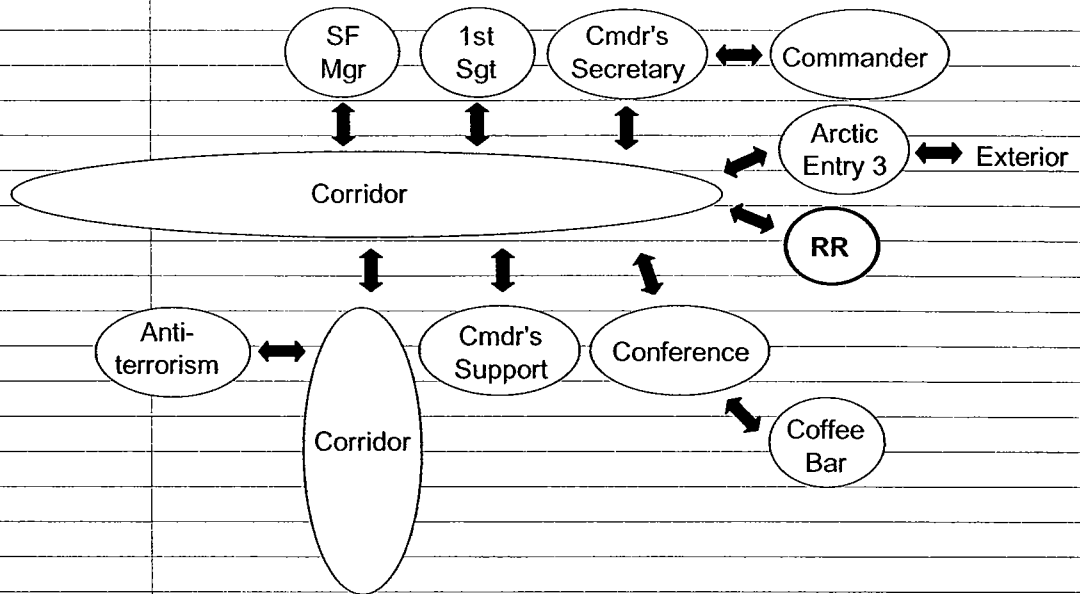
ROOM CRITERIA SHEETS
AD CMD - RESTROOM

ROOM NAME	AD PRIVATE RESTROOM
Function	Washroom
Adjacencies	Near Commander's Office, Command Staff (Commander, Cmdr's Secretary, Cmdr's Support Staff, Coffee Bar, Conference, 1st Sgt, Security Forces Mgr)
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture, surface mounted wrap type fluorescent fixtures on ceiling
Telecommunication	None
Data	None
Plumbing	(1) wall-mounted water closet; (1) lavatory installed in solid surface counter; floor drain
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fan
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface vanity countertop
Security	None
Equipment	None
Furnishings	CFCI: toilet tissue dispenser; paper towel dispenser/receptacle; soap dispenser; vanity mirror; coat hook
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliance
Door	Standard man-door 900 mm x 2100 mm; sound gasketing
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot
Wainscot	1219.2 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - RESTROOM

BUBBLE DIAGRAM

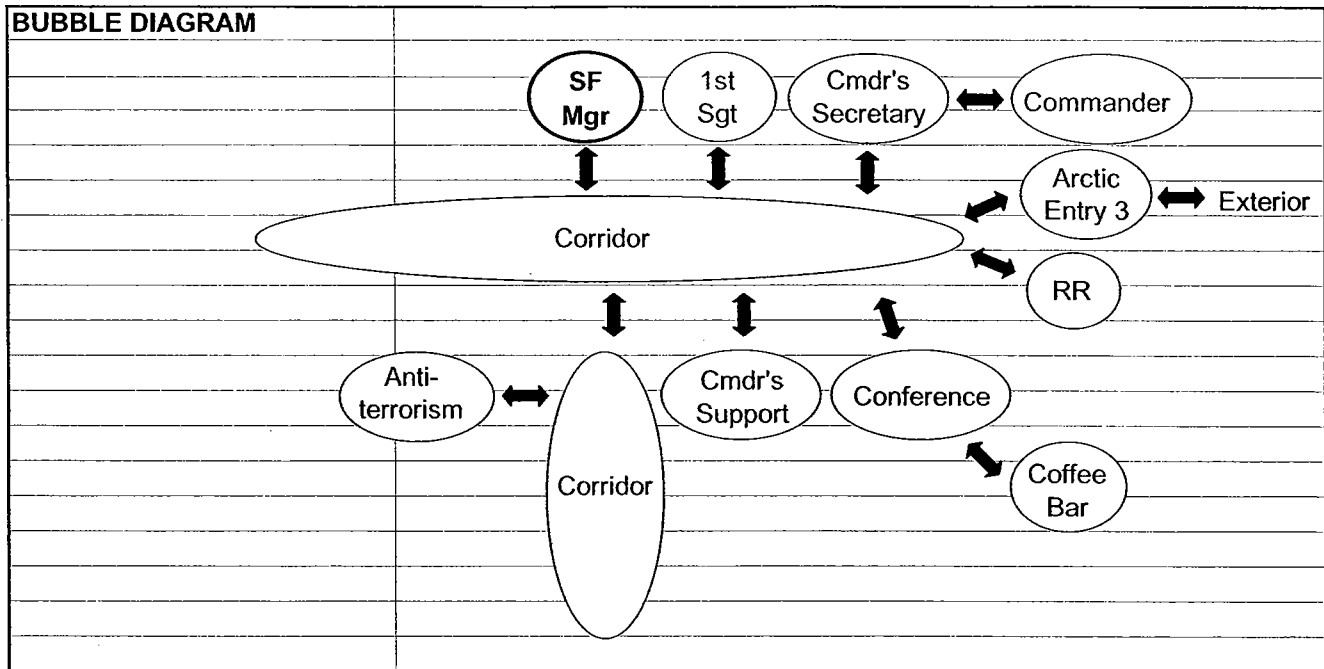


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD CMD - SECURITY FORCES MGR

ROOM NAME	AD SECURITY FORCES MANAGER'S OFFICE
Function	Office space for (1) person; counseling
Adjacencies	Command Staff (Commander, Cmdr's Secretary, Cmdr's Support Staff, Conference, Coffee Bar, 1st Sgt); near Anti-Terrorism
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	CFCI: built-in wall shelving with bottom 1/3 storage and clothes closet on one side for hanging garments
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; (2) guest chairs; (2) person couch
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door with "Security Forces Manager" etched in glass; office function lockset; sound gasketting
Window	Operable windows required
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

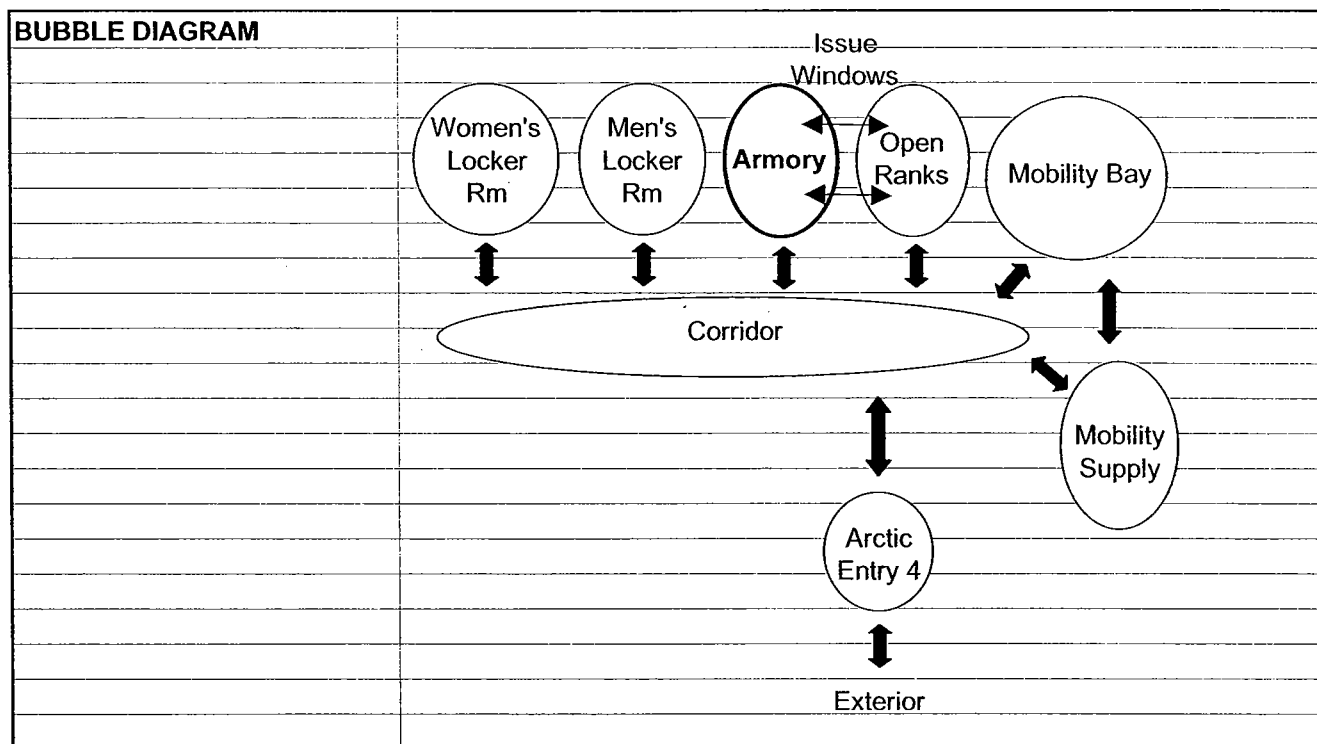
ROOM CRITERIA SHEETS
AD CMD - SECURITY FORCES MGR

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - ARMORY VAULT

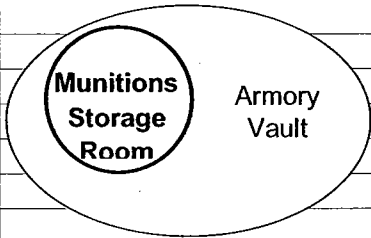
ROOM NAME	AD ARMORY VAULT
Function	Space for secure weapons/munitions storage and issue; privately owned weapons storage; inventory control; weapons repairs
Adjacencies	Open Ranks; near Mobility Bay, Mobility Supply and Locker Rooms
Area	79 SM; includes 6 SM Munitions Storage Vault
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall; additional receptacles/strip at issue counter and cleaning counter
Lighting	Recessed fluorescent or surface wraps as dictated by ceiling type
Telecommunication/Data	A telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	Janitor sink
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust Fan
Compressed Air	Drops
SPECIAL REQUIREMENTS	
Storage	CFCI: (40) 1078.7 mm high x 254 mm deep x 920.8 mm wide M12 racks; (2) 1101.6 mm high x 304.8 mm deep x 1298.5 mm wide M13 racks; (12) 228.6 mm high x 302.3 mm deep x 915.2 mm wide M14 racks; (6) 1841.5 mm high x 635 mm deep x 1384.3 mm wide universal arms small arms storage racks (see Appendix 11)
Casework	None
Security	High-security lock (MIL-P-43607) per MIL-HDBK 1013/1A Table 14; GFGI: camera in Corridor for surveillance of entrance door to Armory Vault with control/monitoring in AD Armory Vault, AD Control Center and ANG Security Control (Option 4)
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	Build Armory per MIL-HDBK-1013/1A Table 14
Door	Armory door shall be a Class 5 vault door per MIL-HDBK-1013/1A Table 14
Window	CFCI: (2) 1016 mm x 1016 mm weapons issue windows into Open Ranks from Armory with coiling counter doors inside Armory (see Appendix 11)
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Sealed concrete
Ceiling	Sealed concrete
Window Treatment	N/A

ROOM CRITERIA SHEETS
AD MOBILITY - ARMORY VAULT



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - ARMORY-MUNITIONS

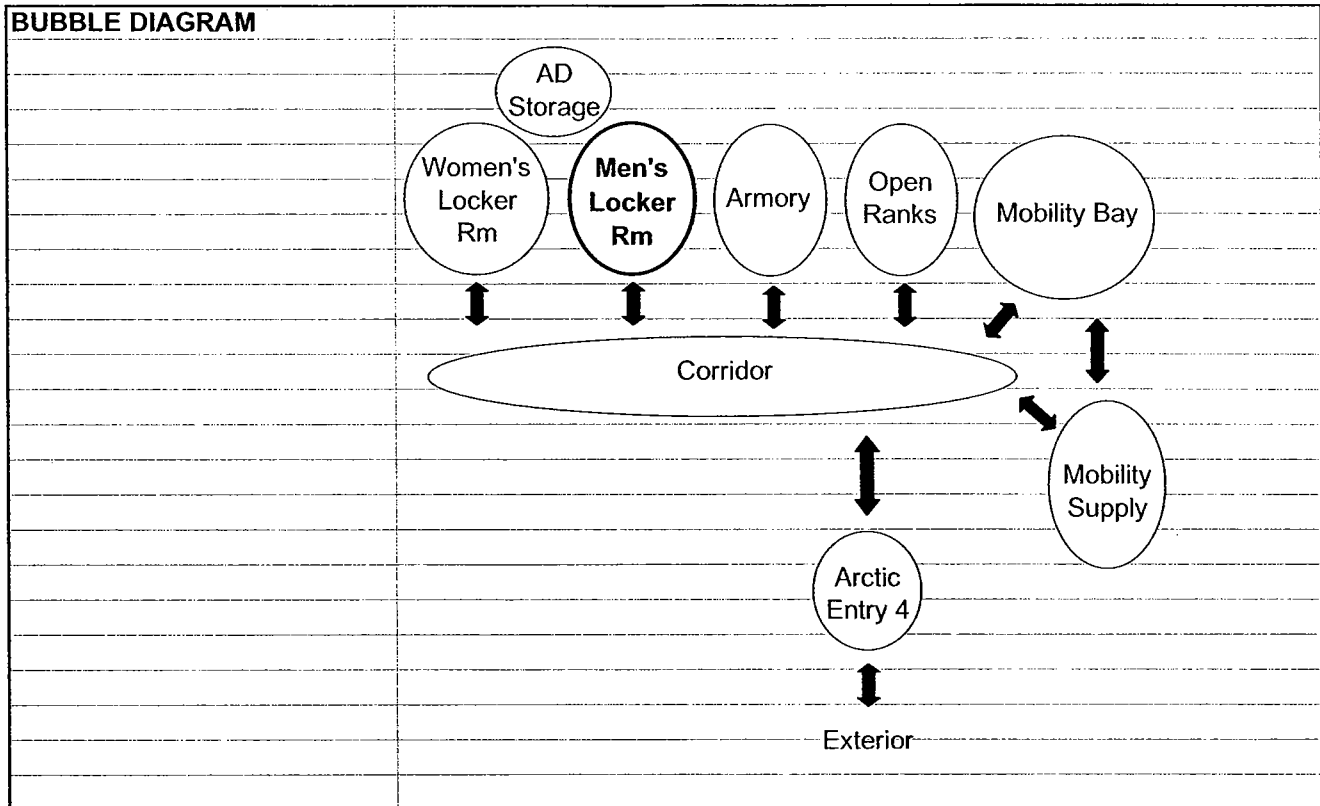
ROOM NAME	AD ARMORY MUNITIONS STORAGE ROOM
Function	Space for munitions storage
Adjacencies	Within Armory
Area	6 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent or surface wraps as dictated by ceiling type
Telecommunication	None
Data	None
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	Build Armory per MIL-HDBK-1013/1A Table 14
Door	Solid core wood door with keyed lockset
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Sealed concrete
Ceiling	Sealed concrete
Window Treatment	N/A
BUBBLE DIAGRAM	
	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - MEN'S LOCKERS

ROOM NAME	AD MEN'S LOCKER ROOM
Function	Washroom; showers; locker storage for crew gear
Adjacencies	Near Mobility group (Armory, Mobility Bay, Mobility Supply, Open Ranks, Women's Lockers), Arctic Entry 4, AD Storage
Area	As needed to support functions
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture (wet service), surface mounted wrap type fluorescent fixtures (wet service) on ceiling
Telecommunication	None
Data	None
Plumbing	(3) 914.4 mm x 914.4 mm shower stalls (ADAAG and UFAS compliance not required); ADAAG and UFAS compliant: (2) wall-mounted water closets, (2) wall-mounted urinals, (2) lavatories installed in solid surface counters; floor drain(s)
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fans
SPECIAL REQUIREMENTS	
Storage	CFCI: (170) metal lockers 609.6 mm wide x 914.4 mm deep x 914.4 mm high; double-stacked
Casework	CFCI: solid surface vanity countertop (1525 mm minimum length)
Security	None
Equipment	None
Furnishings	CFCI: toilet partitions; benches; accessories: coat hooks; full-length mirror; paper towel dispenser/receptacle; shower rod/curtain/hooks; soap dispensers; toilet tissue dispensers; vanity mirrors
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliance in washroom area only; showers and locker/bench areas not ADAAG and UFAS compliant
Door	None; minimum 1219.2 mm wide opening
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot; full height ceramic tile at showers
Wainscot	1524 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - MEN'S LOCKERS

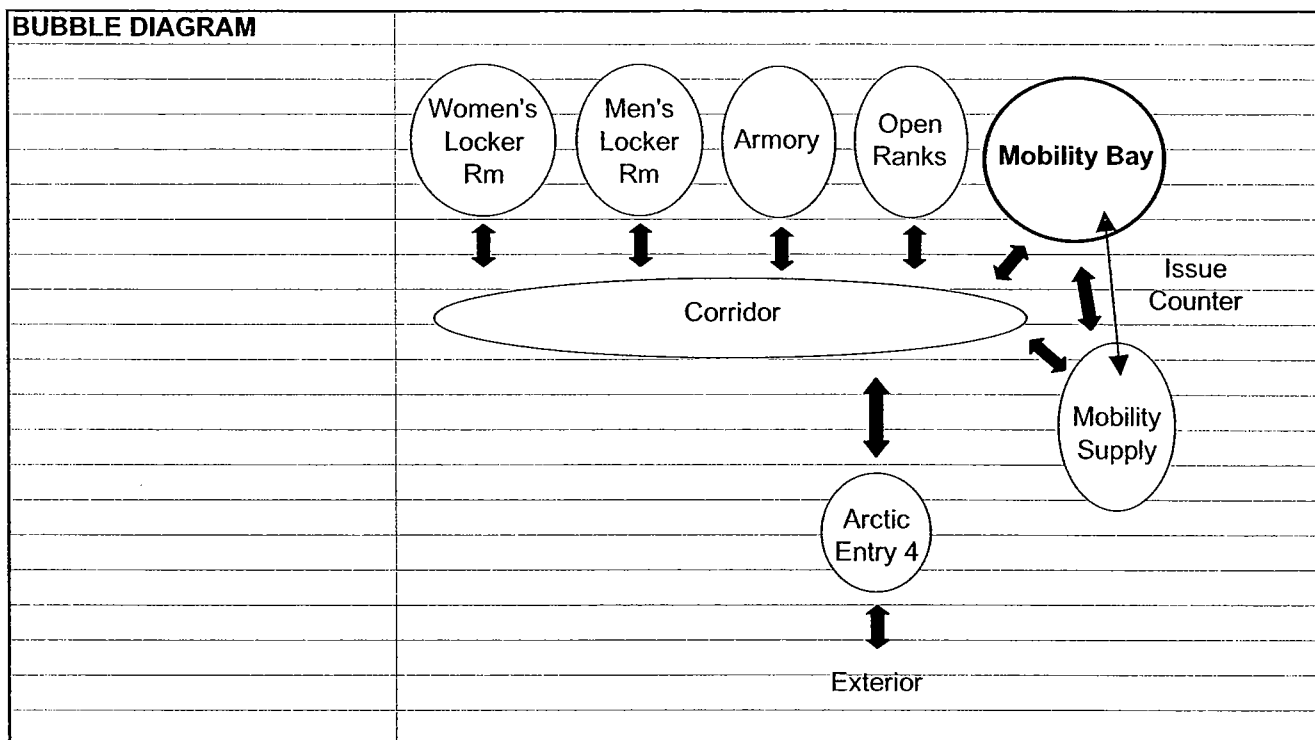
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - MOBILITY BAY

ROOM NAME	AD MOBILITY BAY
Function	Space for mobility pallet assembly; pallet loading on and unloading from vehicles for transport; storage for (5) ATVs with trailers, (8) snow machines, 10K lb forklift
Adjacencies	Direct access to Mobility Supply; Corridor; near Locker Rooms, Open Ranks
Area	297.3 SM; rectangular plan
Minimum Ceiling Height	6096 mm to lowest obstruction
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall
Lighting	4-lamp industrial fluorescent, T5 HO lamps or equivalent facilitation, cold weather ballasts
Telecommunication/Data	A telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	CFCI: floor mounted janitor sink; rim guard; faucet with wall brace; vacuum breaker; bucket hook; washer/dryer hook-ups; trench drain with 100 gal minimum evaporative pit
Heating	Separate air handling unit to provide heat and outside air for the room operation. See RFP for system specifics.
Ventilation	Included in the heating above
Shop Compressed Air	Minimum (2) drops
Fire Protection	Protect sprinkler heads from freezing or provide separate dry zone
SPECIAL REQUIREMENTS	
Storage	CFCI: (48) heavy-duty perforated metal lockers 609.6 mm wide x 914.4 mm deep x 914.4 mm high; GFGI: (3) Pallet Racks (Option 2) (see Appendix 11)
Casework	None
Security	None
Equipment	GFGI: (12) 2235.2 mm x 2743.2 mm x 2438.4 mm cargo pallets
Furnishings	None
Acoustical	STC 62 to adjacent spaces
Life Safety	Emergency eyewash
Door	Sectional overhead door 4876.8 mm x 4876.8 mm; standard man-door 900 mm x 2100 mm to exterior; double man-door 1800 mm x 2100 mm to Corridor; sound gasketing to interior
Window	None
FINISHES	
Floor	Sealed concrete
Base	None
Walls	Paint, lightest color practical; gloss finish
Wainscot	Desired; D/B team shall spec high-impact resistant material; no wood; must meet flammability requirements; up to 2438.4 mm above floor
Ceiling	Open to structure, painted, acoustical roof deck
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

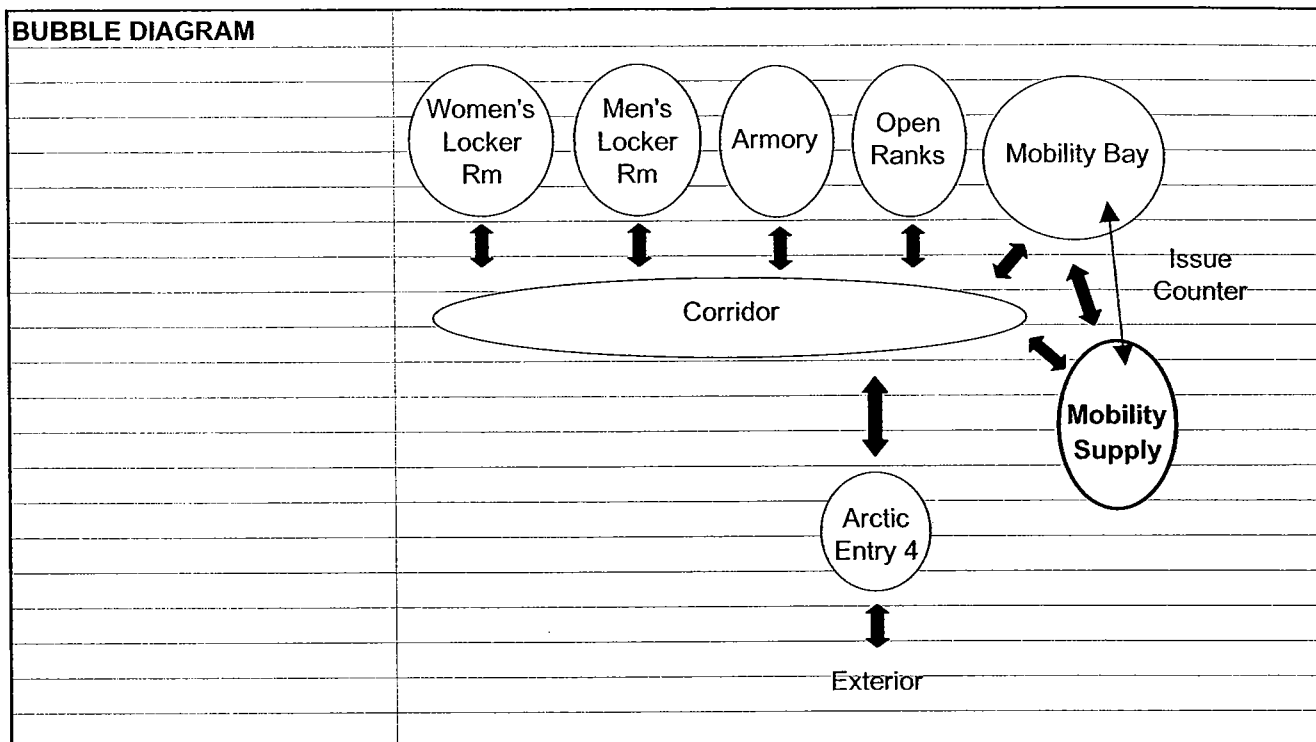
ROOM CRITERIA SHEETS
AD MOBILITY - MOBILITY BAY



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - MOBILITY SUPPLY

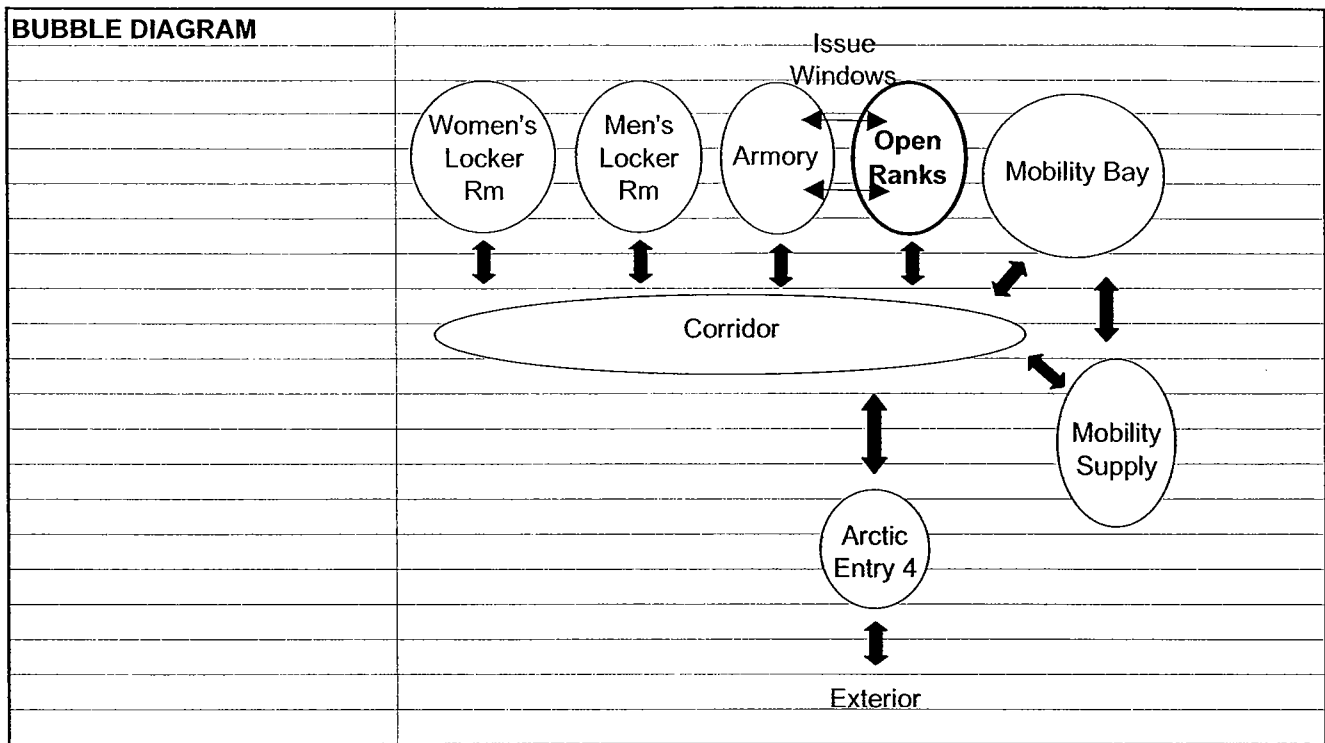
ROOM NAME	AD MOBILITY SUPPLY
Function	Supply room for bench stock; daily issue of gear and equipment (handcuffs, web belts, cold weather gear, vests, office supplies)
Adjacencies	Direct access to Mobility Bay; Corridor; near Armory, Open Ranks, Locker Rooms
Area	74.3 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, additional receptacles at counter area
Lighting	Recessed fluorescent
Telecommunication/Data	(2) voice ports, (2) additional at issue counter height; (2) data ports, (3) additional at issue counter height and a minimum of a telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: heavy-duty shelving
Casework	None
Security	None
Equipment	GFGI: (3) computers
Furnishings	GFGI: (3) work stations; issue counter to Mobility Bay
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm to Corridor; glazed panel in door; office function lockset; double man-door 1800 mm x 2100 mm between this room and Mobility Bay; glazed panel in doors; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - OPEN RANKS

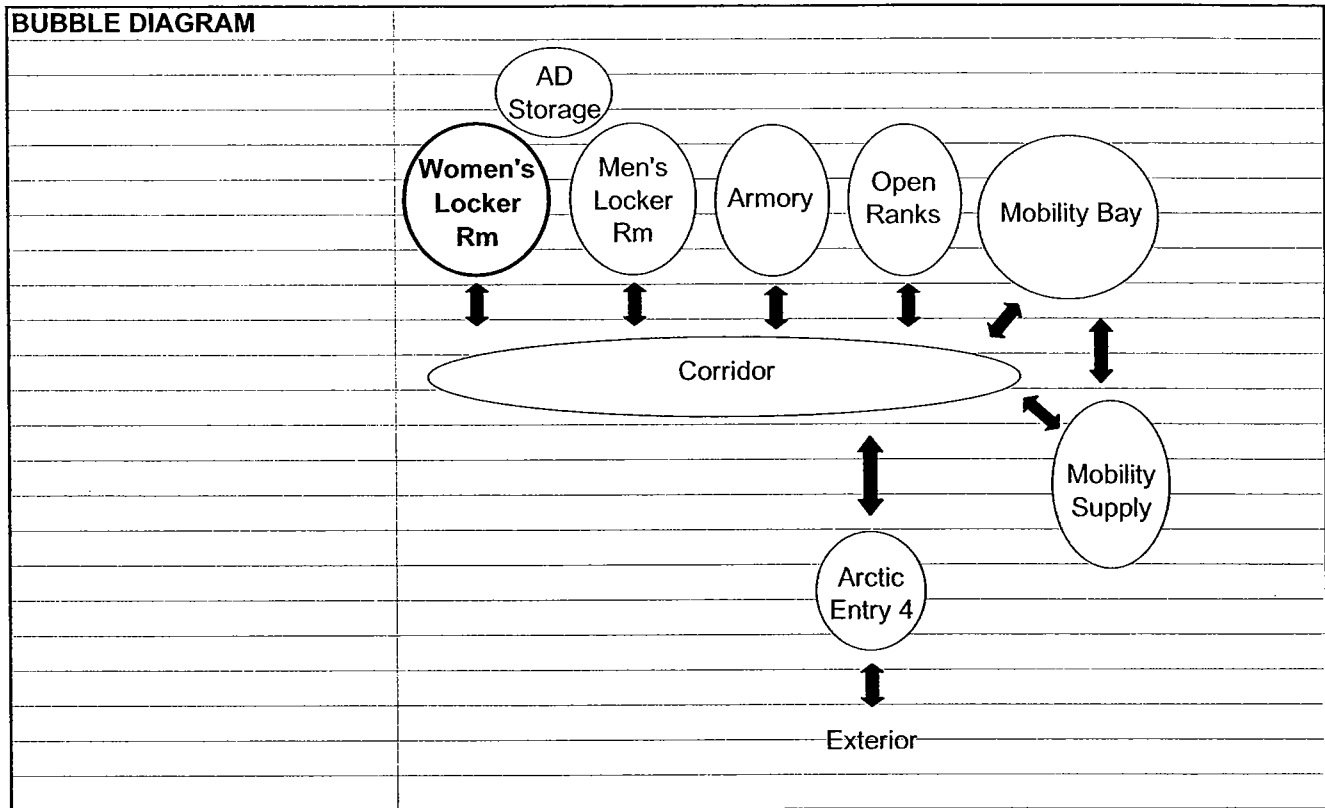
ROOM NAME	AD OPEN RANKS INSPECTION AREA
Function	Inspection; weapons issue; guardmount
Adjacencies	Armory; near Locker Rooms
Area	92.9 SM
Minimum Ceiling Height	Open to structure
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, additional receptacles at issue counter and cleaning counter
Lighting	4-lamp industrial fluorescent, T5 HO lamps or equivalent facilitation
Telecommunication/Data	A telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
Compressed Air	(4-6) drops at weapons cleaning counter
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: stainless steel weapons cleaning counter; will be used simultaneously by 15-20 people; run full length of wall opposite issue windows (12192 mm minimum length)
Security	GFGI: security access control/alarm
Equipment	None
Furnishings	None
Acoustical	STC 62 to adjacent spaces; sound attenuation within the room; very noisy area
Life Safety	None
Door	Requires wall-to-wall doors from corridor into guardmount area with glazing to ensure all can see if guardmount is underway and not to enter; office function locksets; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Vinyl composition tile or resilient sheet flooring; rubber tile mat at weapons cleaning counter
Base	Rubber
Walls	Painted GWB
Ceiling	Open to structure
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD MOBILITY - WOMEN'S LOCKERS

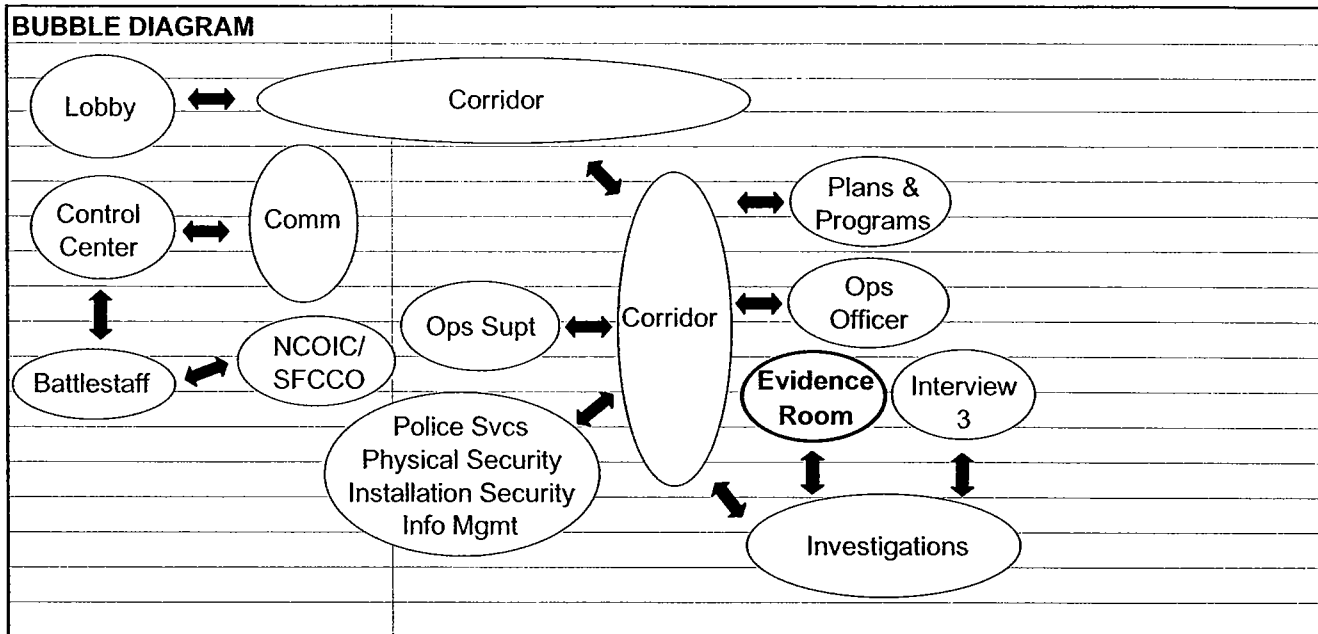
ROOM NAME	AD WOMEN'S LOCKER ROOM
Function	Washroom; showers; locker storage for crew gear
Adjacencies	Near Mobility group (Armory, Mobility Bay, Mobility Supply, Open Ranks, Men's Lockers), Arctic Entry 4, AD Storage
Area	As needed to support functions
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture (wet service), surface mounted wrap type fluorescent fixtures (wet service) on ceiling
Telecommunication	None
Data	None
Plumbing	(1) 914.4 mm x 914.4 mm shower stall (ADAAG and UFAS compliance not required); ADAAG and UFAS compliant: (2) wall-mounted water closets, (2) lavatories installed in solid surface counters; floor drain(s)
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fans
SPECIAL REQUIREMENTS	
Storage	CFCI: (15) metal lockers 609.6 mm wide x 914.4 mm deep x 914.4 mm high; double-stacked
Casework	CFCI: solid surface vanity countertop (1525 mm minimum length)
Security	None
Equipment	None
Furnishings	CFCI: toilet partitions; benches; accessories: coat hooks; full-length mirror; paper towel dispenser/receptacle; sanitary napkin/tampon dispenser; sanitary napkin/tampon disposal; shower rod/curtain/hooks; soap dispensers; toilet tissue dispensers; vanity mirrors
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliance in washroom area only; shower and locker/bench areas not ADAAG and UFAS compliant
Door	None; minimum 1219.2 mm wide opening
Window	None
FINISHES	
Floor	Ceramic tile
Base	Rubber
Walls	Painted GWB exposed above wainscot; full height ceramic tile at showers
Wainscot	1524 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - EVIDENCE ROOM

ROOM NAME	AD EVIDENCE ROOM
Function	Evidence storage
Adjacencies	Investigations office; entrance through Investigations
Area	7.2 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: security access control/alarm; magnetic contact switch on door with alarm to AD Control Center
Equipment	None
Furnishings	GFGI: (1) work station; (1) chair; couch
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard solid core man-door 900 mm x 2100 mm between this room and Investigations; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A

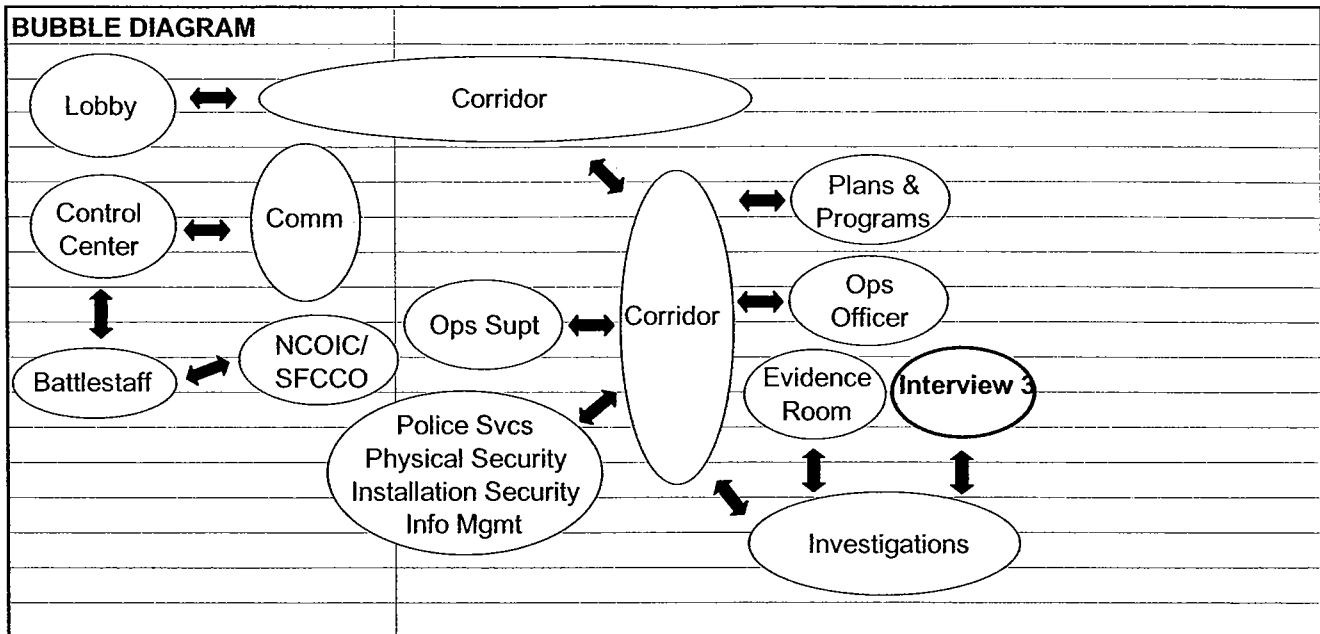


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS

AD OPS - INTERVIEW 3

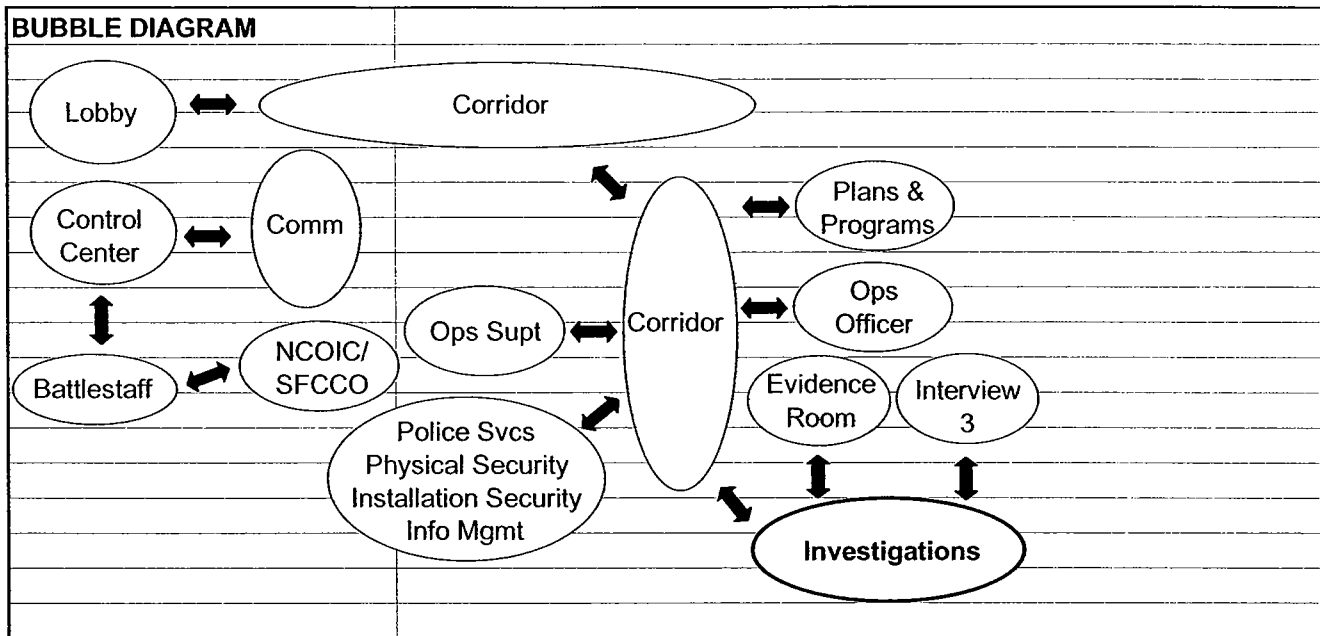
ROOM NAME	AD INTERVIEW ROOM 3
Function	Office space utilized for interviewing
Adjacencies	Investigations office; entrance through Investigations
Area	9.3 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: security access control/alarm; security camera with control/monitoring in AD Control Center and ANG Security Control (Option 4)
Equipment	GFGI: (1) computer
Furnishings	GFGI: table with (3) chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and Investigations; glazed panel in door; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - INVESTIGATIONS

ROOM NAME	AD INVESTIGATIONS OFFICE
Function	Office space for (3) people
Adjacencies	Evidence Room; Interview Rm 3; Ops group (NCOIC/SFCCO, Ops Officer, Ops Supt, Plans & Programs, Police Svcs); near Lobby
Area	29.7 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and and additional duplex receptacle for each person
Lighting	Recessed fluorescent with mult-level switching
Telecommunication/Data	GFGI: STU; III; fax machine; CFCI: (3) voice ports; (3) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (3) computers; printer; 914.4 mm x 1524 mm dry erase board; TV; VCR
Furnishings	GFGI: (3) work stations; table with (4) chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



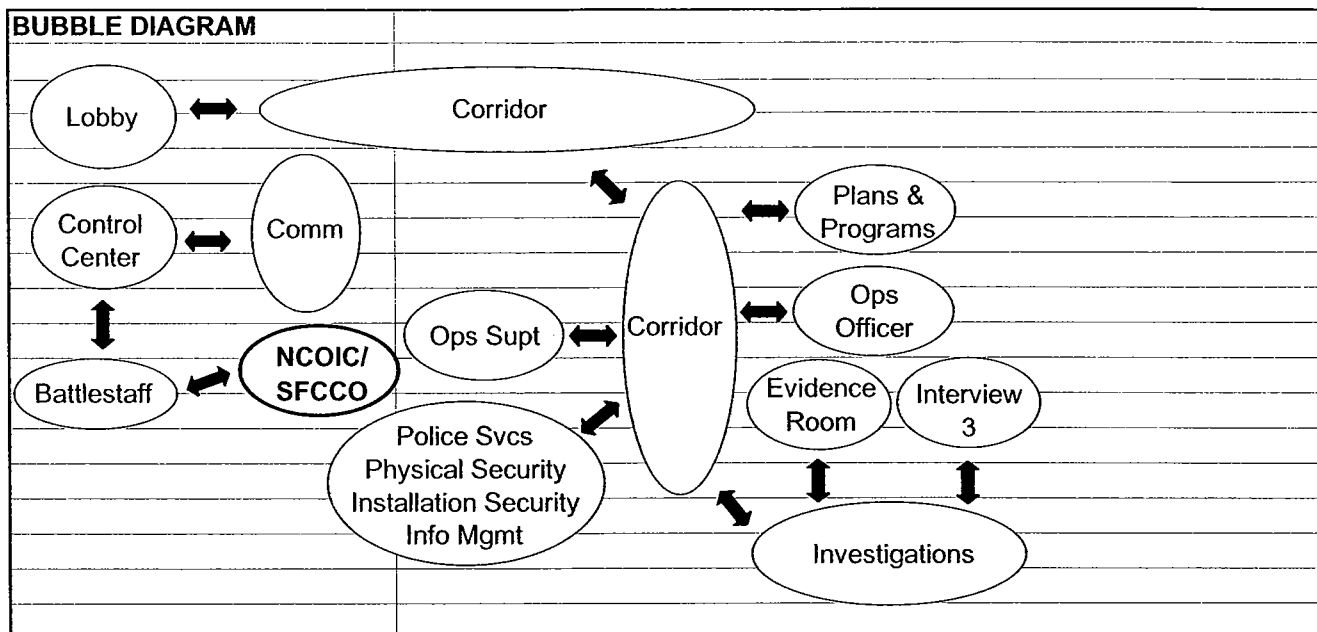
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS

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AD OPS - NCOIC-SFCCO

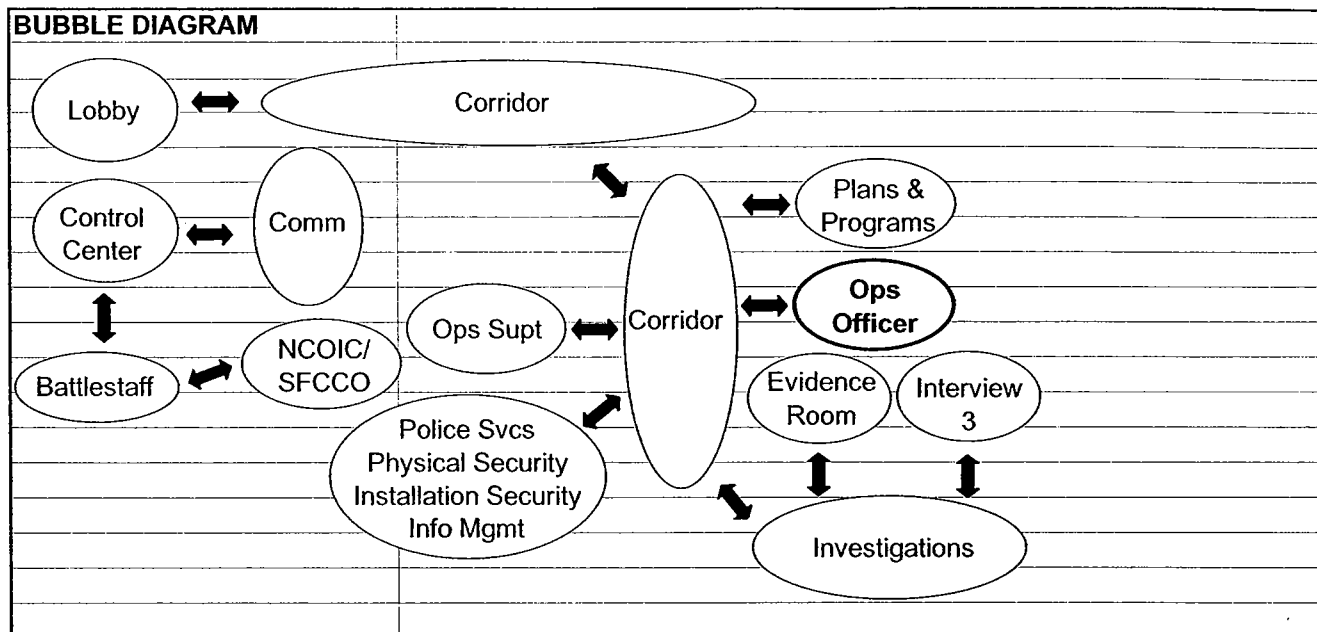
ROOM NAME	AD NCOIC / SFCCO
Function	Office space for (1) person; in charge of all control functions and Ops group
Adjacencies	Battlestaff; Control Center; entrance through Battlestaff or Control Center; near Ops group (Investigations, Ops Officer, Ops Supt, Plans & Programs, Police Svcs)
Area	11.1 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STU; III; CFCI: (3) voice ports; (3) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Provide separate cooling system for Battlestaff, Communications, Control Center and NCOIC/SFCCO.
SPECIAL REQUIREMENTS	
Storage	GFGI: lockable cabinet
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (2) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and Battlestaff or Control Center; glazed panel in door; office function lockset; sound gasketing
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - OPS OFFICER

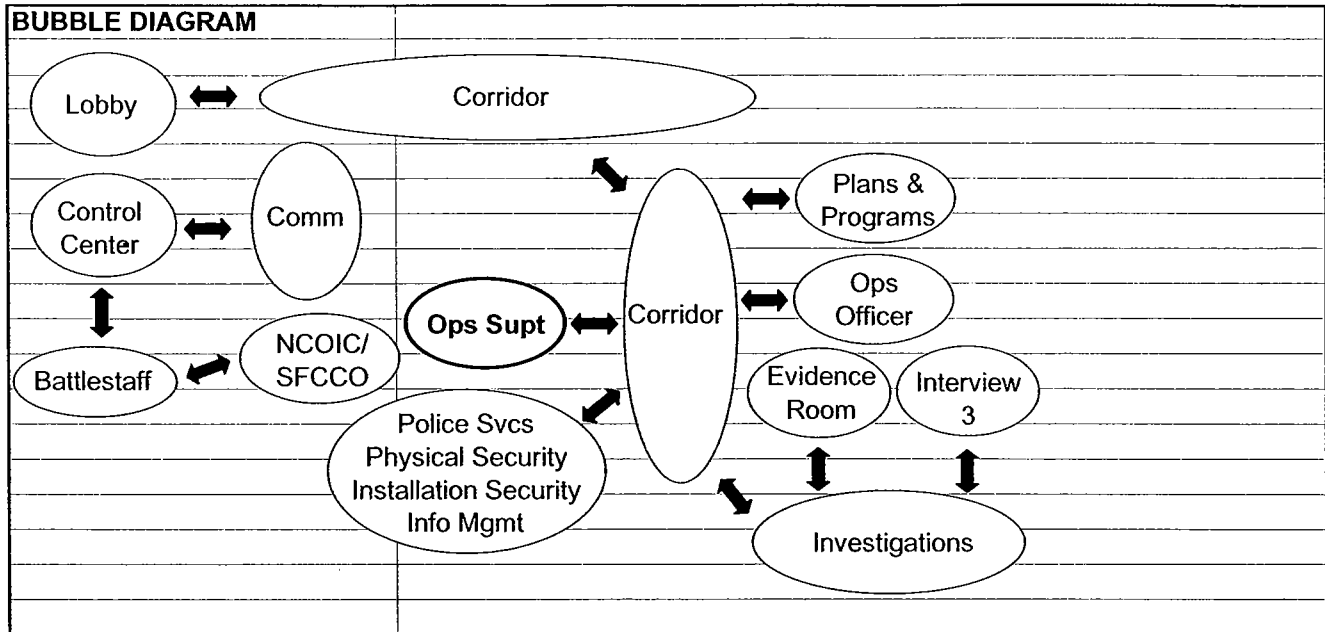
ROOM NAME	AD OPERATIONS OFFICER'S OFFICE
Function	Office space for (1) person; in charge of daily operations; Aircraft/Physical Security; Police Services
Adjacencies	Ops group (Investigations, NCOIC/SFCCO, Ops Supt, Plans & Programs, Police Svcs); near Lobby
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STU; III; CFCI: (2) voice ports; (2) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: cabinet
Casework	None
Security	None
Equipment	GFGI: (1) computer; printer
Furnishings	GFGI: (1) work station; 4-6 person table and chairs; couch
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - OPS SUPT

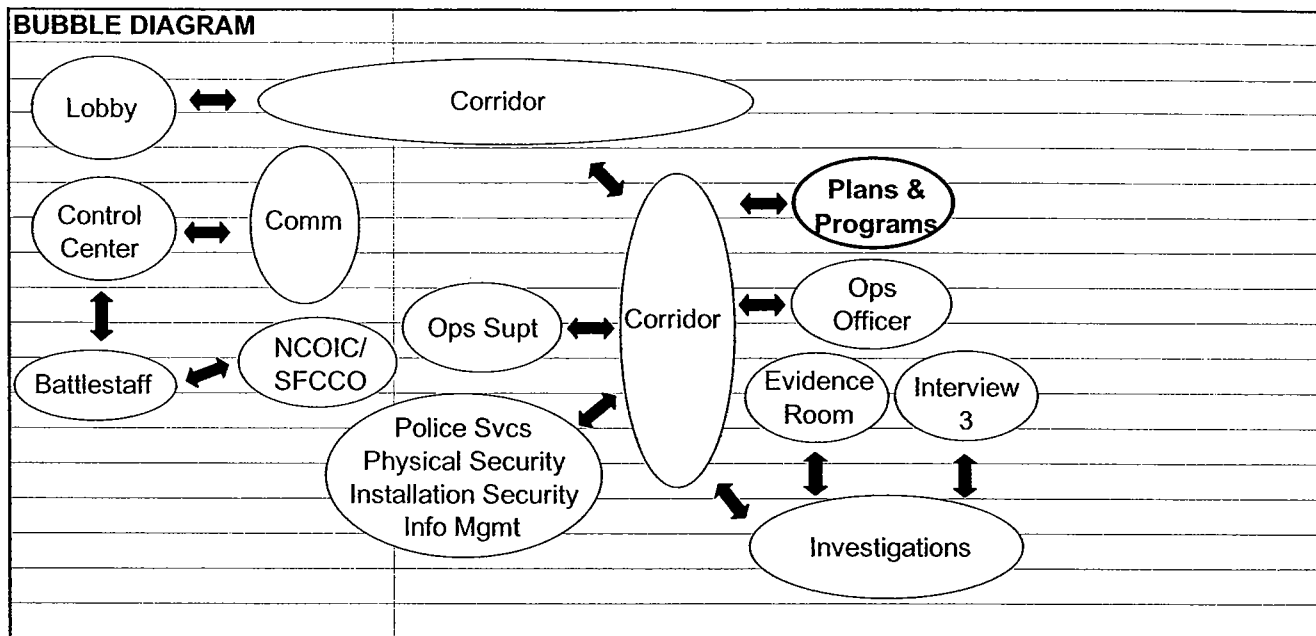
ROOM NAME	AD OPS SUPERINTENDENT'S OFFICE
Function	Office space for (1) person; utilized for management of staff functions
Adjacencies	Ops group (Investigations, NCOIC/SFCCO, Ops Officer, Plans & Programs, Police Svcs); near Lobby
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STU; III; CFCI: (2) voice ports; (2) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: book shelves; cabinet
Casework	None
Security	None
Equipment	GFGI: (1) computer; printer; 914.4 mm x 1524 mm dry erase board
Furnishings	GFGI: (1) work station; (2) guest chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - PLANS & PROGRAMS

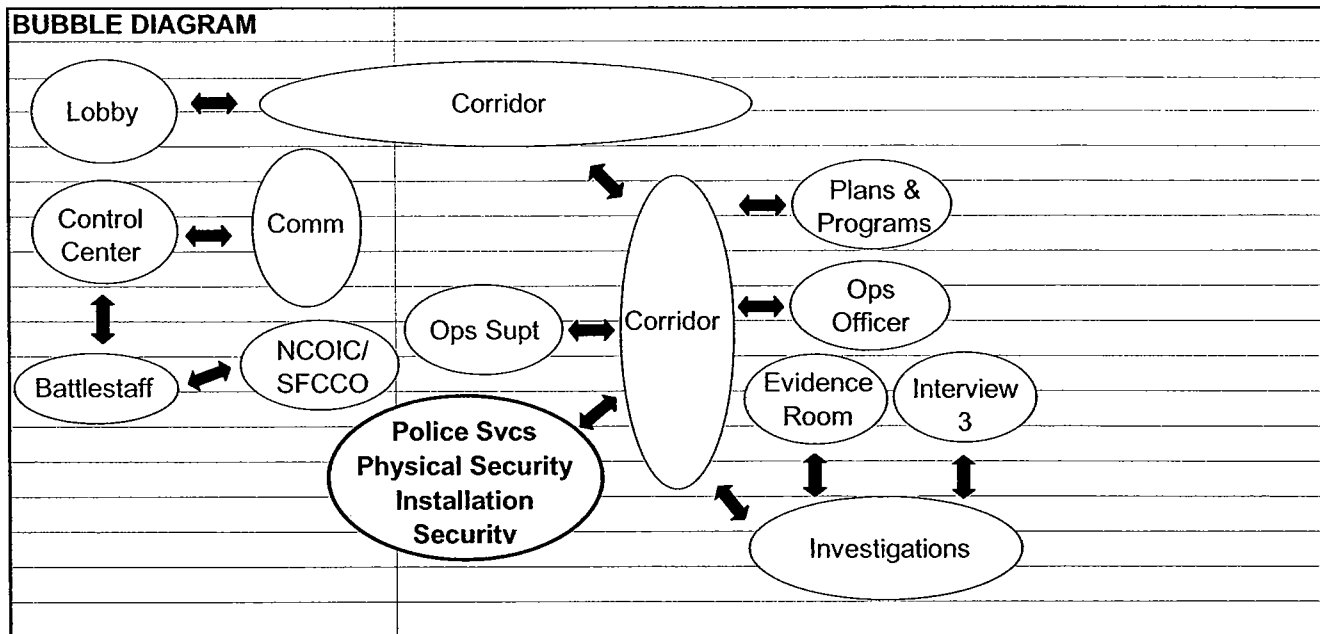
ROOM NAME	AD PLANS & PROGRAMS
Function	Office space for (1) person
Adjacencies	Ops group (Investigations, NCOIC/SFCCO, Ops Officer, Ops Supt, Police Svcs); near Lobby
Area	11.1 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	GFGI: STU; III; CFCI: (2) voice ports; (2) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: certified wall safe; (2) file cabinets; book shelf
Casework	None
Security	None
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) work stations; (1) guest chair
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD OPS - POLICE SVCS

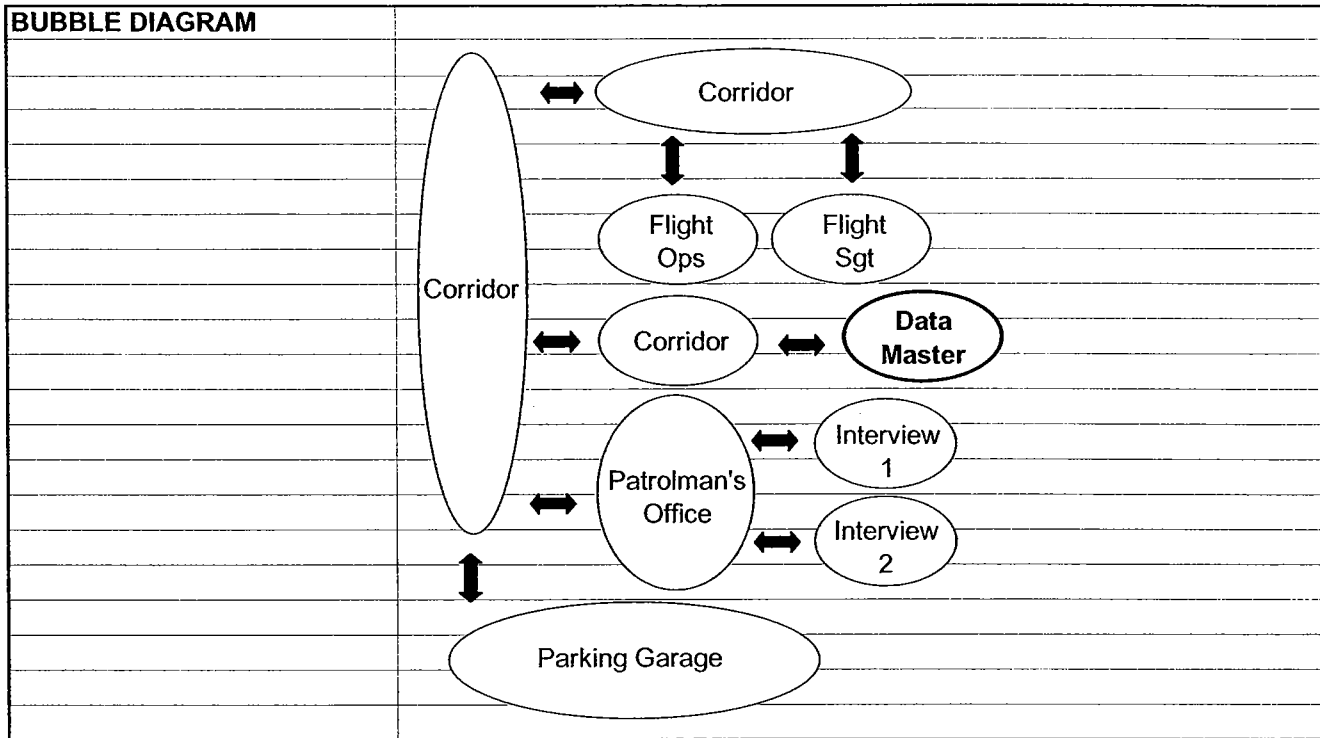
ROOM NAME	AD POLICE SERVICES / PHYSICAL SECURITY / INSTALLATION SECURITY / INFORMATION MANAGEMENT
Function	Office space for (4) people
Adjacencies	Ops group (Investigations, NCOIC/SFCCO, Ops Officer, Ops Supt, Plans & Programs); near Lobby
Area	27.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(4) voice ports; (4) data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: closet for police services equipment; certified safe; (2-3) cabinets with pull-out map cabinet
Casework	None
Security	None
Equipment	GFGI: (4) computers
Furnishings	GFGI: (4) work stations; (2) guest chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - DATA MASTER

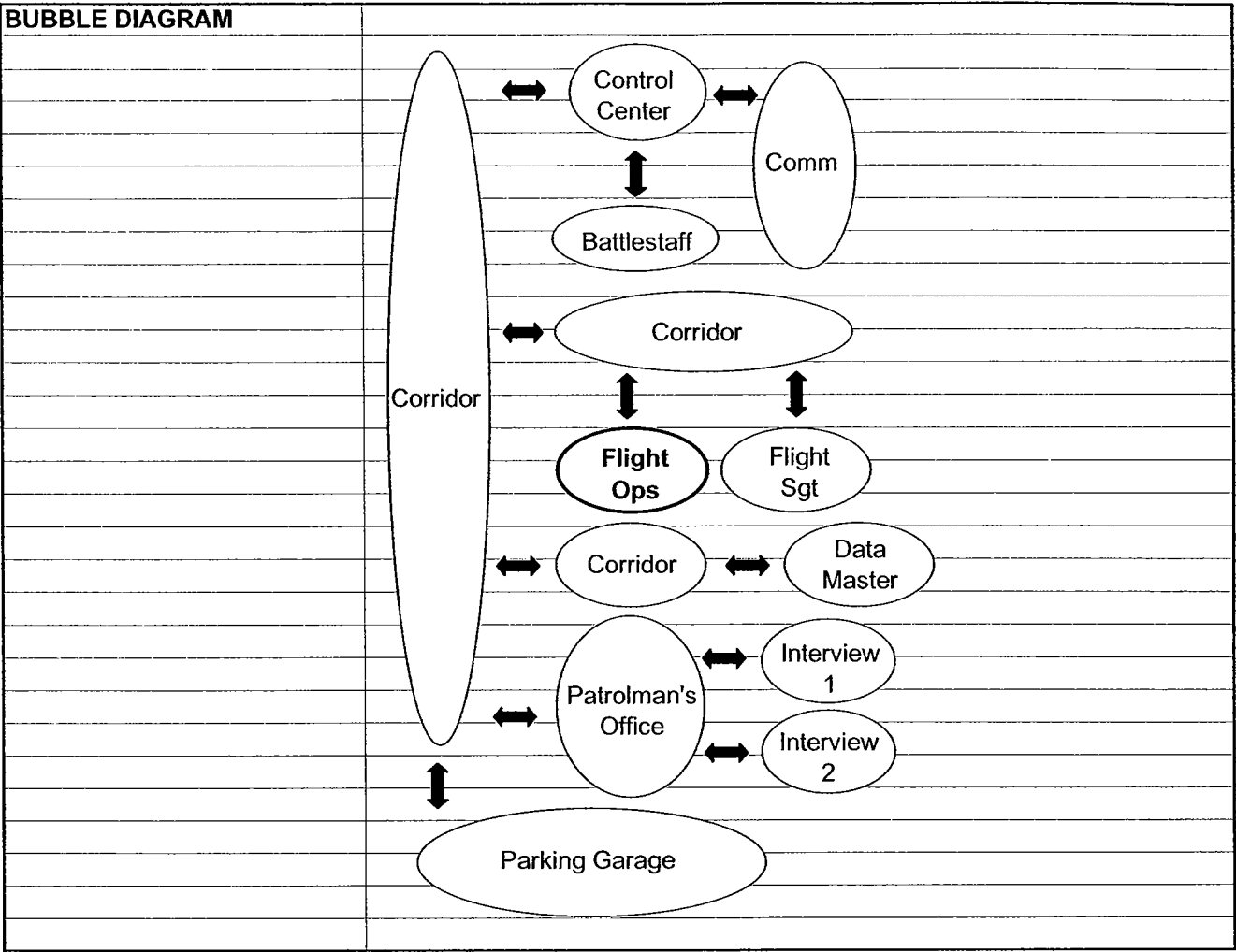
ROOM NAME	AD DATA MASTER'S OFFICE
Function	Office space utilized for storage and operation of breathalyzer
Adjacencies	Patrolman's Office; away from Interview Rms 1 & 2; cannot be located between Patrolman's Office and Parking Garage; individuals who have consumed alcohol passing by Data Master's Office will affect readings of breathalyzer; near Parking Garage
Area	7.4 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Special ventilation to control heat and maintain positive pressure; note heat gain from special equipment
SPECIAL REQUIREMENTS	
Storage	CFCI: built-in wall cabinet
Casework	None
Security	GFGI: security access control/alarm; security camera with control/monitoring in AD Control Center only (Option 4)
Equipment	GFGI: breathalyzer
Furnishings	GFGI: table with (2) chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - FLIGHT OPS

ROOM NAME	AD FLIGHT OPERATIONS OFFICE
Function	Office space for (1) person; utilized for management of armed security personnel in the field; Flight Sgt; Police Svcs
Adjacencies	Flight Sgt; near Control Center
Area	11.1 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	CFCl: office supply closet
Casework	None
Security	None
Equipment	GFGI: (2) computers; printer
Furnishings	GFGI: (2) work stations; (2) guest chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCl: Louvered blinds

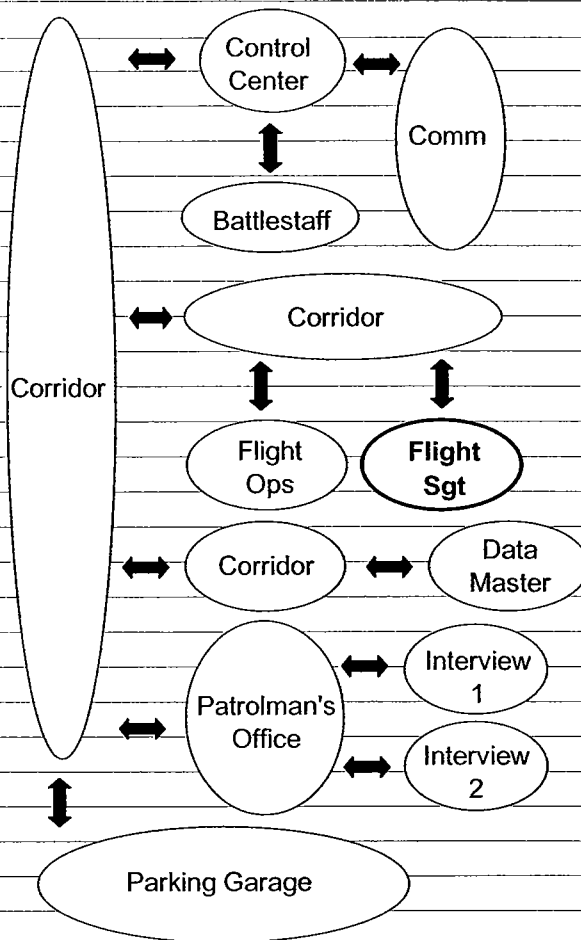


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - FLIGHT SGT

ROOM NAME	AD FLIGHT SERGEANT'S OFFICE
Function	Office space for (6) people; utilized for processing forms from Control Center
Adjacencies	Flight Ops; near Control Center, Patrolman's Office
Area	22.3 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (6) computers; printer; fax machine; copy machine
Furnishings	GFGI: (6) work stations; table in center
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

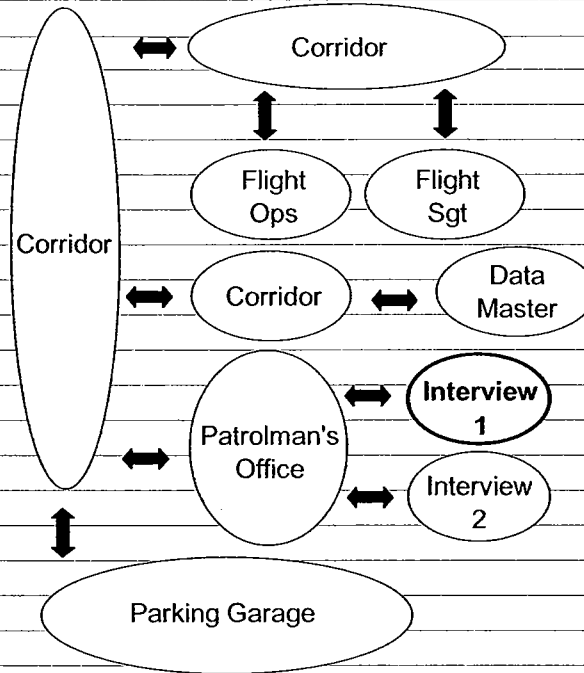
BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - INTERVIEW RM 1

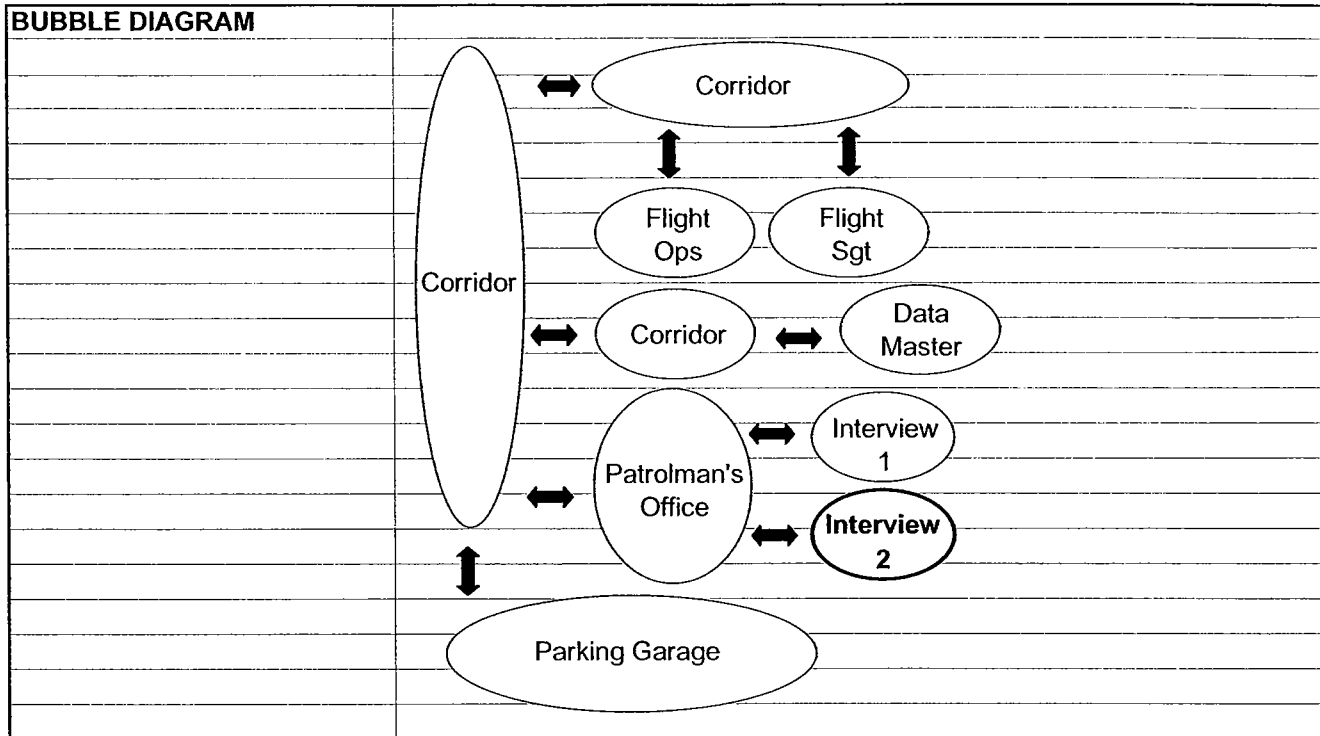
ROOM NAME	AD INTERVIEW ROOM 1
Function	Office space
Adjacencies	Patrolman's Office; entrance through Patrolman's office
Area	7.4 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching; switch located outside of room
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: audio/video recording capability (shielded cameras) with control/monitoring in AD Control Center only (Option 4)
Equipment	None
Furnishings	GFGI: table with (3) chairs
Acoustical	STC 62 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A

BUBBLE DIAGRAM

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - INTERVIEW RM 2

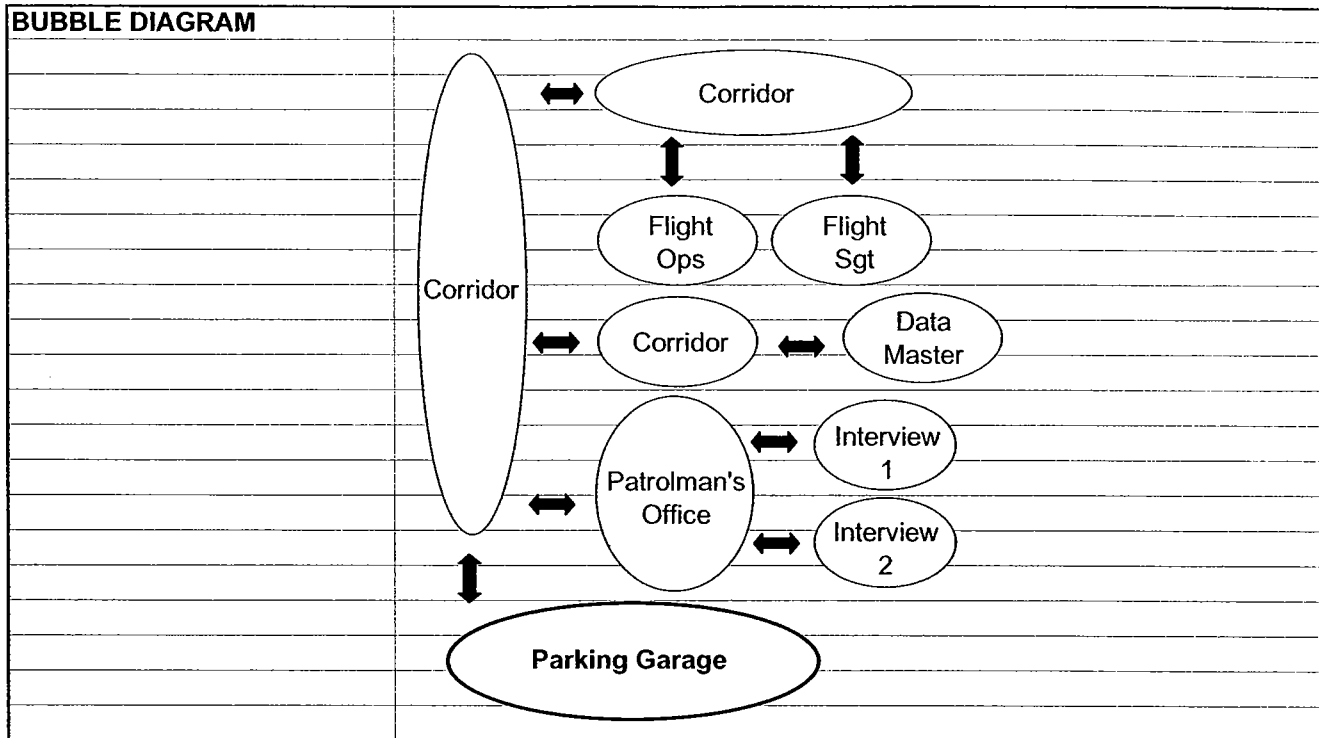
ROOM NAME	AD INTERVIEW ROOM 2
Function	Office space
Adjacencies	Patrolman's Office; entrance through Patrolman's office
Area	7.4 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching; switch located outside of room
Telecommunication/Data	A telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: audio/video recording capability (shielded cameras) with control/monitoring in AD Control Center only (Option 4)
Equipment	None
Furnishings	GFGI: table with (3) chairs
Acoustical	STC 62 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - PARKING GARAGE

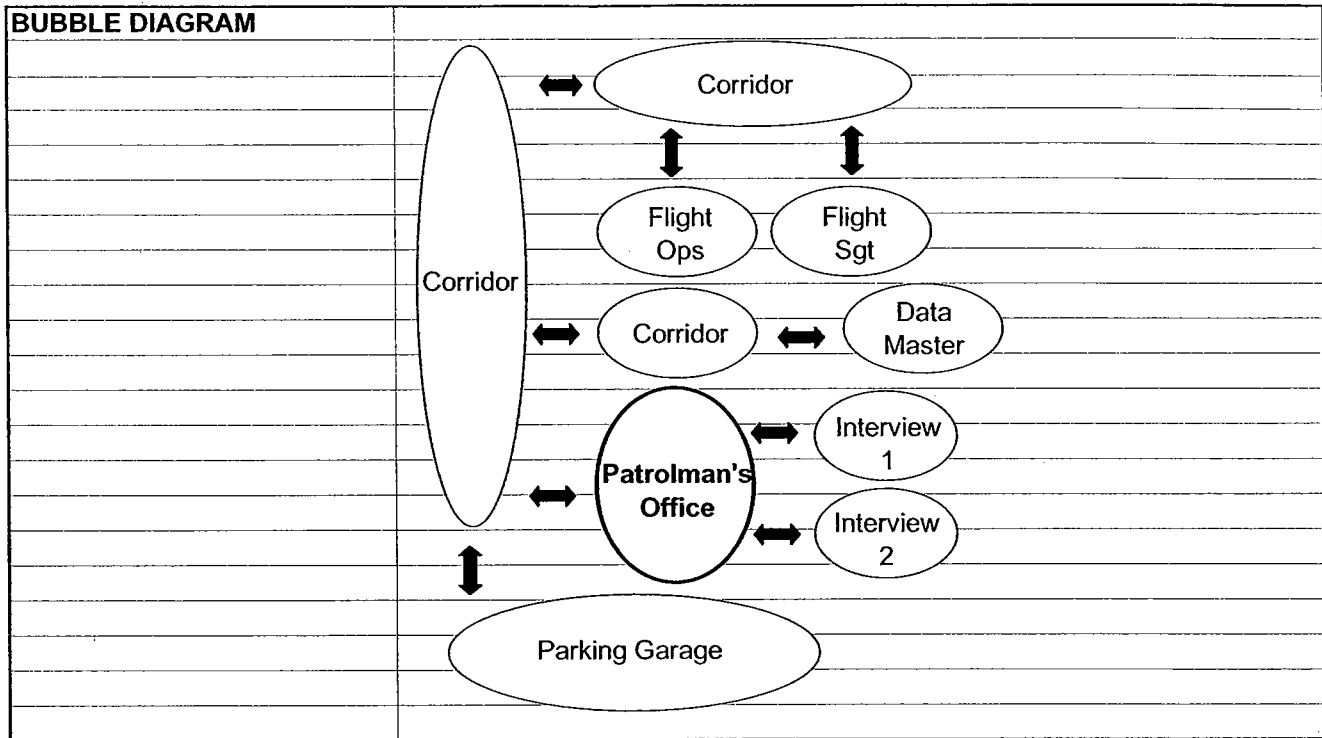
ROOM NAME	AD PARKING GARAGE / WARM VEHICLE STORAGE
Function	(9) parking spaces and (1) wash bay; storage of (7) emergency response vehicles, 2.5 ton 6-pack truck with camper shell, (2) CWD trailers; vehicle wash bay
Adjacencies	Corridor; near Data Master, Patrolman's Office
Area	303.2 SM; rectangular plan preferred; plan for SWAT van clearances at overhead doors and ceiling
Minimum Ceiling Height	406.4 mm; design to allow for camper shell and SWAT van height
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall
Lighting	4-lamp Industrial fluorescent, T5 HO lamps or equivalent facilitation, cold weather ballasts
Telecommunication/Data	(2) telecommunication/data outlets (near bench/desk) and a minimum of a telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	Provide an oil/water separator in the slab of the wash bay; pipe waste to the sanitary sewer
Heating	Separate air handling unit to provide heat and outside air for the exhaust system; unit heaters for heating during unoccupied periods; radiant slab heating system in the concrete floor (Option 1)
Ventilation	Provide separate ventilation system to comply with applicable Codes
Shop Compressed Air	Drop
Fire Protection	Protect sprinkler heads from freezing or provide separate dry zone
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	CFCI: Commercial wash system with power washer, brush, automatic soap dispenser; wash rack (see Appendix 11); commercial vacuum (see Appendix 11)
Furnishings	GFGI: bench stock
Acoustical	STC 52 to adjacent spaces; acoustical roof deck
Life Safety	Emergency eyewash
Door	Sectional overhead door 4876.8 mm x 4876.8 mm with automatic opener; standard man-door 900 mm x 2100 mm to exterior; standard man-door 900 mm x 2100 mm to Corridor; sound gasketing to interior
Window	None
FINISHES	
Floor	Sealed concrete
Base	None
Walls	Paint, lightest color practical; gloss finish
Wainscot	Epoxy-painted CMU full height at wash rack; for remainder of Parking Garage D/B team shall spec high-impact resistant material; no wood; must meet flammability requirements; up to 2438.4 mm above floor
Ceiling	Exposed to structure, painted
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD POLICE SVCS - PATROLMAN

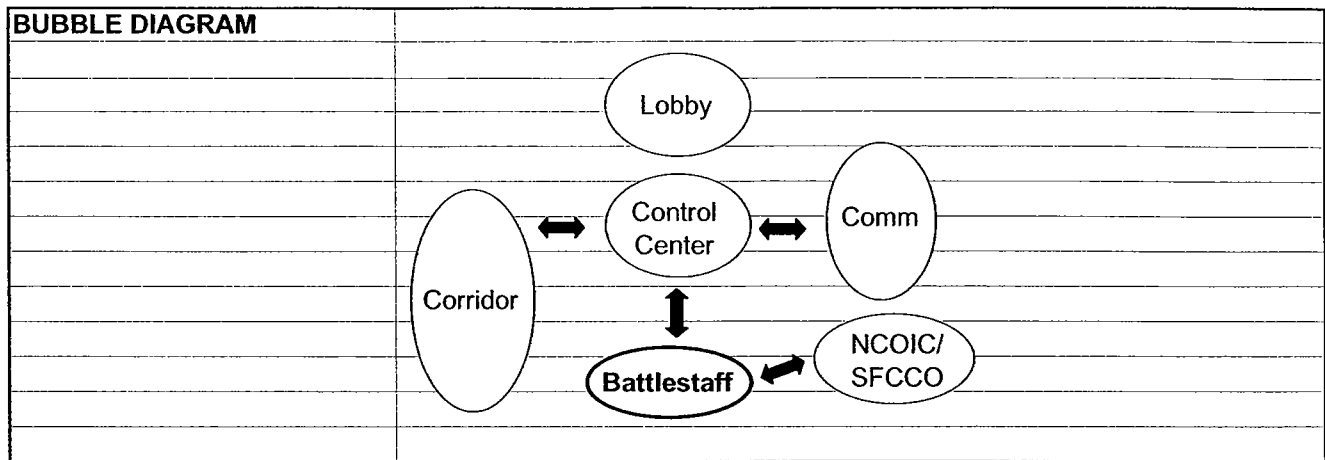
ROOM NAME	AD PATROLMAN'S OFFICE
Function	Office space for (3) people; utilized for report preparation
Adjacencies	Interview Rooms 1 and 2; Data Master; near Flight Sgt, Parking Garage
Area	11.1 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(3) telecommunication outlets and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: cabinet
Casework	None
Security	None
Equipment	GFGI: (3) computers with camera displays/video recorder
Furnishings	GFGI: (3) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SFCC - BATTLESTAFF

ROOM NAME		AD BATTLESTAFF
Function		Space for monitoring Base activity
Adjacencies		Behind and overlooking Control Center; Communications; NCOIC/SFCCO; entrance through Control Center
Area		18.6 SM
Minimum Ceiling Height		2743.2 mm
BUILDING SYSTEMS		
Electrical		Two duplex receptacles on each wall; a dedicated power strip and circuits for consoles
Lighting		Recessed florescent (multi-level/fully dimmable with lighting controller)
Telecommunication		(4) voice ports, (2) classified voice line ports; (1) SIPR net ports, (3) non-secure LAN ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle.
Data		(1) SIPR net ports, (3) non-secure LAN ports
Plumbing		None
Heating		To be provided by the central system
Ventilation		Provide separate cooling system for Battlestaff, Communications, Control Center, NCOIC/SFCCO
Fire Protection		Provide a local pre-action zone to be monitored by occupants
SPECIAL REQUIREMENTS		
Storage		None
Casework		GFGI: counter to run length of wall beneath windows overlooking Control Center
Security		GFGI: video coverage of Base, Facility, flight line (Option 4)
Equipment		GFGI: (4-5) computers
Furnishings		GFGI: (4-5) work stations
Acoustical		STC 47 to adjacent spaces
Life Safety		None
Door		Solid man-door 900 mm x 2100 mm between this room and Control Center; sound gasketting
Window		Sliding glass windows overlooking Control Center to run length of wall above counter and to height of ceiling
FINISHES		
Floor		Raised computer access floor system, 609.6 mm above Control Center finished floor; carpet
Base		Rubber
Walls		Painted fully grouted masonry wall (filled block or PPC) between this room and any adjacent public or semi-public areas; painted GWB; glazing between this room and Control Center (see "Window" above)
Ceiling		Suspended acoustical panel
Window Treatment		N/A



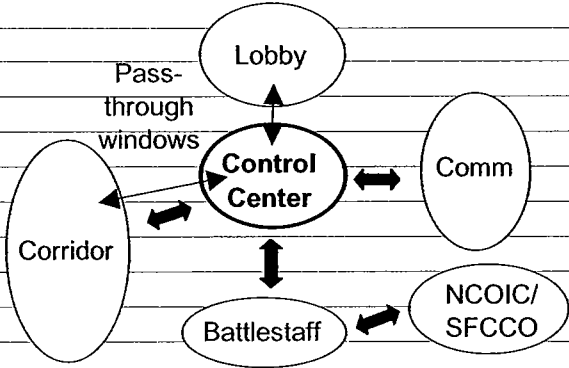
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SFCC - CONTROL CENTER

ROOM NAME	AD CONTROL CENTER
Function	Control of all access to Facility; 24-hour operation; office space for (1) Controller, (1) Alarm Monitor, (1) Fire Dispatcher
Adjacencies	Lobby; Battlestaff; Communications; NCOIC/SFCCO
Area	37.2 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall, an additional duplex receptacles on 900 mm centers, and an additional duplex receptacle per person. Plus the following: 1 twist lock for Advator, 4 outlets for dicta phones, 14 outlets for CPUs and Monitors, 4 dedicated outlets for video monitors, 4 dedicated outlets for plasma screens.
Lighting	Recessed fluorescent (multi-level/fully dimmable with lighting controller)
Telecommunication/Data	(8) voice ports, mass notification; classified phone system; enhanced 911 system, cable tray system; (1) SIPR net ports, (8) non-secure LAN ports, cable tray system and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Provide cooling system for Battlestaff, Communications, Control Center, NCOIC/SFCCO and CATS Room
Fire Protection	Provide a local pre-action zone to be monitored by occupants
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: secured access; electronically controlled door; intercoms; control and monitoring of all interior and exterior cameras at site; cameras must have pan/tilt/zoom and audio/video recording capability (Option 4); camera in Corridor for surveillance of entrance door to AD Control Center with control/monitoring in AD Control Center and ANG Security Control
Equipment	GFGI: (6) computers; printer; fax machine; WPNS racks; map board; see Appendix 11 for list of equipment
Furnishings	GFGI: (3) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Reinforced solid man-door 900 mm x 2100 mm; sound gasketing
Window	914.4 mm x 1524 mm bullet-resistant observation window with security pass-through compartment into Lobby; 914.4 mm x 1524 mm bullet-resistant observation window with security pass-through compartment into Corridor; entire unit (window and compartment) must be ballistically protected; separate slide-through box-type drawer is acceptable

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SFCC - CONTROL CENTER

FINISHES	
Floor	Raised computer access floor system; rubber tile
Base	Rubber
Walls	Painted fully grouted masonry wall (filled block or PPC) between this room and any other adjacent public or semi-public areas; painted GWB; glazing between this room and Battlestaff (see "Window" on Battlestaff Room Criteria Sheet)
Ceiling	Security lid; suspended acoustical panel
Window Treatment	N/A
BUBBLE DIAGRAM	
	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SF INFO - PERS-IND-INFO SEC

ROOM NAME	AD PERSONNEL, INDUSTRIAL, INFORMATION SECURITY
Function	Office space for (4) people; utilized for security clearances; background investigations; industrial and classified information security
Adjacencies	Reports & Analysis/Info Mgmt; Reports & Analysis Supt; near Lobby
Area	27.9 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(4) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: (1) GSA approved 2-drawer security container
Casework	None
Security	None
Equipment	GFGI: (4) computers
Furnishings	GFGI: (4) work stations; (2) guest chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD Lobby((Lobby)) <--> Corridor RAM((Reports & Analysis/ Info Mgmt)) <--> Corridor PIIS((Personnel, Industrial, Info Security)) <--> Corridor RAS((R & A Supt)) <--> Corridor Corridor --- Corridor </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SF INFO - R&A-INFO MGMT

ROOM NAME	AD REPORTS & ANALYSIS / INFORMATION MANAGEMENT
Function	Office space for (5) people; Reports & Analysis: maintain records on individuals and crime events; analyze criminal statistics; Information Management: publications and information filing; computer security
Adjacencies	Personnel, Industrial, Info Security; near Lobby, Reports & Analysis Supt; far from Cmdr
Area	27.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(5) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: (3) 5-drawer file cabinets
Casework	None
Security	None
Equipment	GFGI: (5) computers
Furnishings	GFGI: (5) work stations with guest seating; systems furniture reception counter open to Corridor
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD Lobby((Lobby)) --> RA[Reports & Analysis/ Info Mgmt] RA <--> PIC[Personnel, Industrial, Info Security] RA <--> RAS[R & A Supt] RA <--> RC[Reception Counter] RA <--> Corridor([Corridor]) PIC <--> RAS PIC <--> RC RAS <--> RC RC <--> Corridor Corridor <--> Lobby </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD SF INFO - R & A SUPT

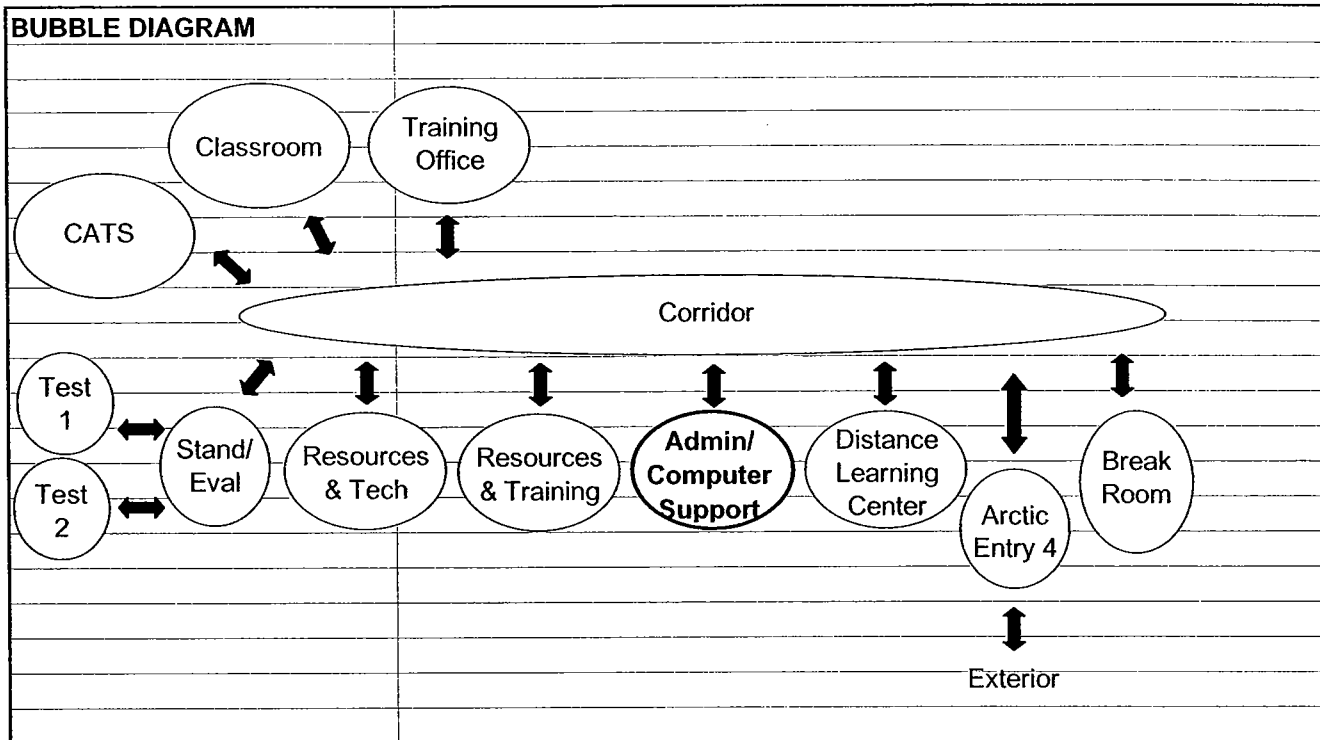
ROOM NAME	AD REPORTS & ANALYSIS SUPERINTENDENT'S OFFICE
Function	Office space for (1) person; utilized for management of Reports & Analysis; scheduling flights; counseling
Adjacencies	Personnel, Industrial, Info Security; near Reports & Analysis/Info Mgmt
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer; dry erase board
Furnishings	GFGI: (1) work station; chair; couch
Acoustical	STC 52 to adjacent offices
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD Lobby((Lobby)) <--> RA[Reports & Analysis/Info Mgmt] RA <--> PIS[Personnel, Industrial, Info Security] PIS <--> RAS((R & A Supt)) Lobby <--> Corridor([Corridor]) RA <--> Corridor PIS <--> Corridor RAS <--> Corridor </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - ADMIN-COMP

ROOM NAME	AD ADMINISTRATION / COMPUTER SUPPORT
Function	Office space for (2) people
Adjacencies	Near Training group (Break Room, Distance Learning, Resources Training, Resources & Tech Support, Stand/Eval, Test Rms 1 & 2, Training); Training group should be near Classroom and CATS
Area	11.1 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

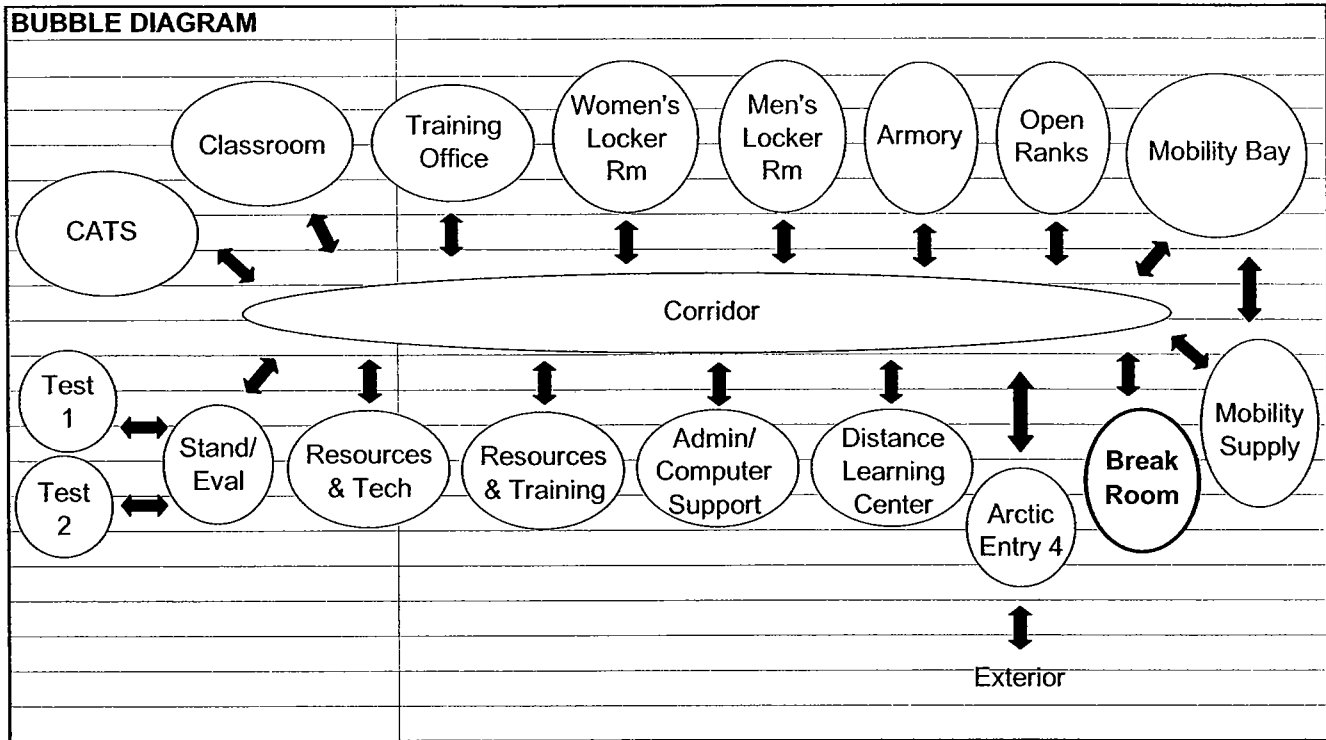
ROOM CRITERIA SHEETS
AD TRAINING - ADMIN-COMP

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

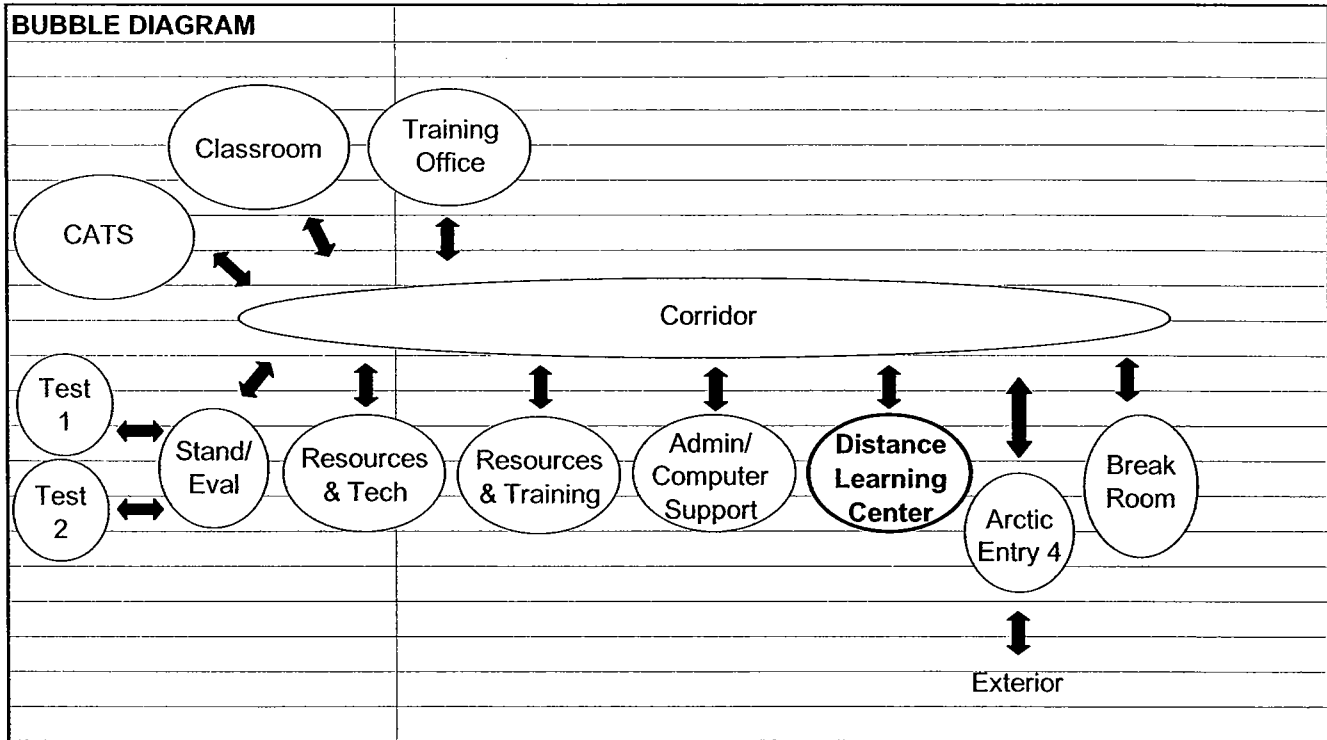
ROOM CRITERIA SHEETS
AD TRAINING - BREAK ROOM

ROOM NAME	AD BREAK ROOM
Function	Space for coffee and lunch breaks; studying
Adjacencies	Between Mobility group (Armory, Locker Rooms, Mobility Bay, Mobility Supply, Open Ranks) and Training group (Admin/Computer Support, Distance Learning, Resources Training, Resources & Tech Support, Stand/Eval, Test Rms 1 & 2, Training)
Area	69.7 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	(5) duplex receptacles above counter, an additional duplex receptacle on each wall
Lighting	Recessed fluorescent
Telecommunication	(1) voice port
Data	(1) data port
Plumbing	Double basin stainless steel sink with gooseneck faucet and instant hot water generator with countertop spigot; rough-in for refrigerator with icemaker
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface countertop (1828.8 mm minimum length); cabinets
Security	None
Equipment	GFGI: upright refrigerator with ice maker; microwave oven; 914.4 mm x 1524 mm dry erase board
Furnishings	GFGI: tables & chairs to seat (24)
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Vinyl composition tile or resilient flooring
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm; movable partition wall
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - BREAK ROOM

ROOM NAME	AD DISTANCE LEARNING
Function	Office space utilized for studying; learning from cds
Adjacencies	Near Training group (Admin/Computer Support, Break Room, Resources Training, Resources & Tech Support, Stand/Eval, Test Rms 1 & 2, Training); Training group should be near Classroom and CATS
Area	26 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacle on each wall - (1) additional within 914.4 mm of each telecommunication/data receptacle
Lighting	Recessed fluorescent with multi-level switching
Telecommunication	(10) voice ports
Data	(10) data ports
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (8) computers
Furnishings	GFGI: systems furniture; (8) work stations; (2) tables; (8) chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

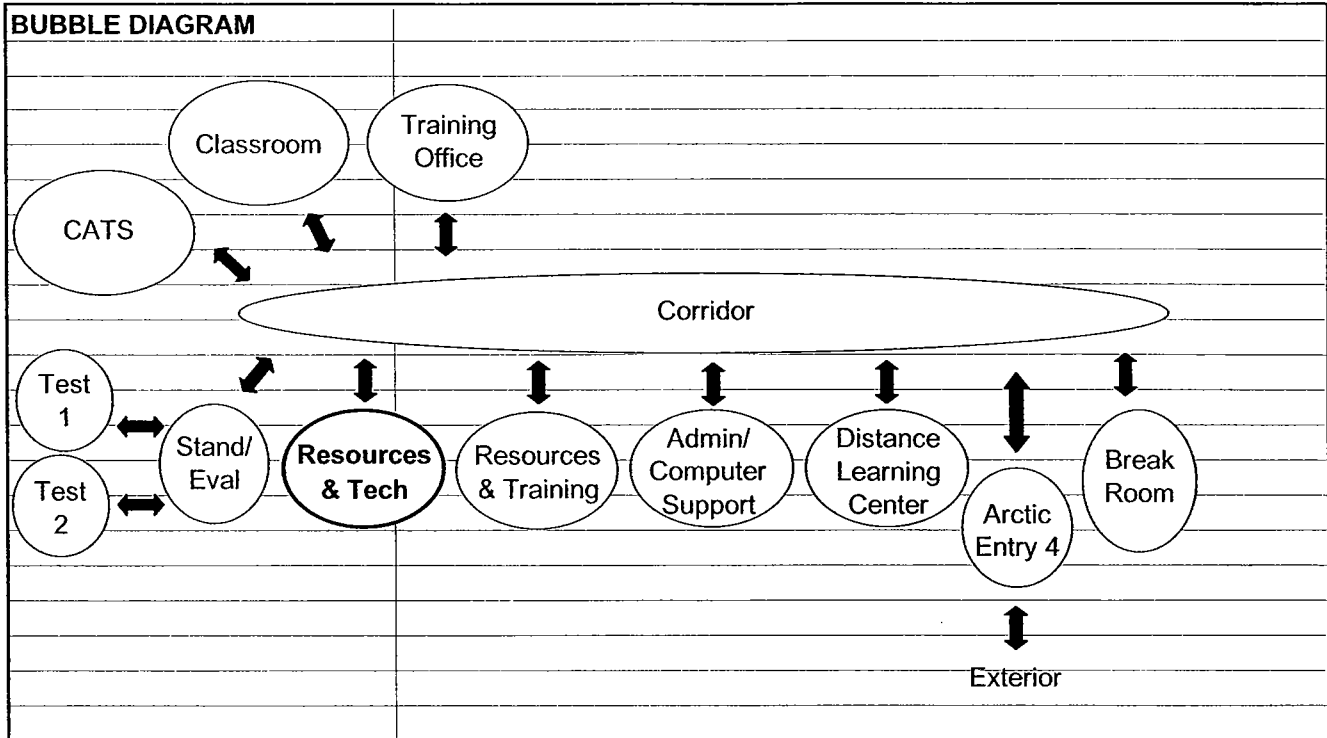


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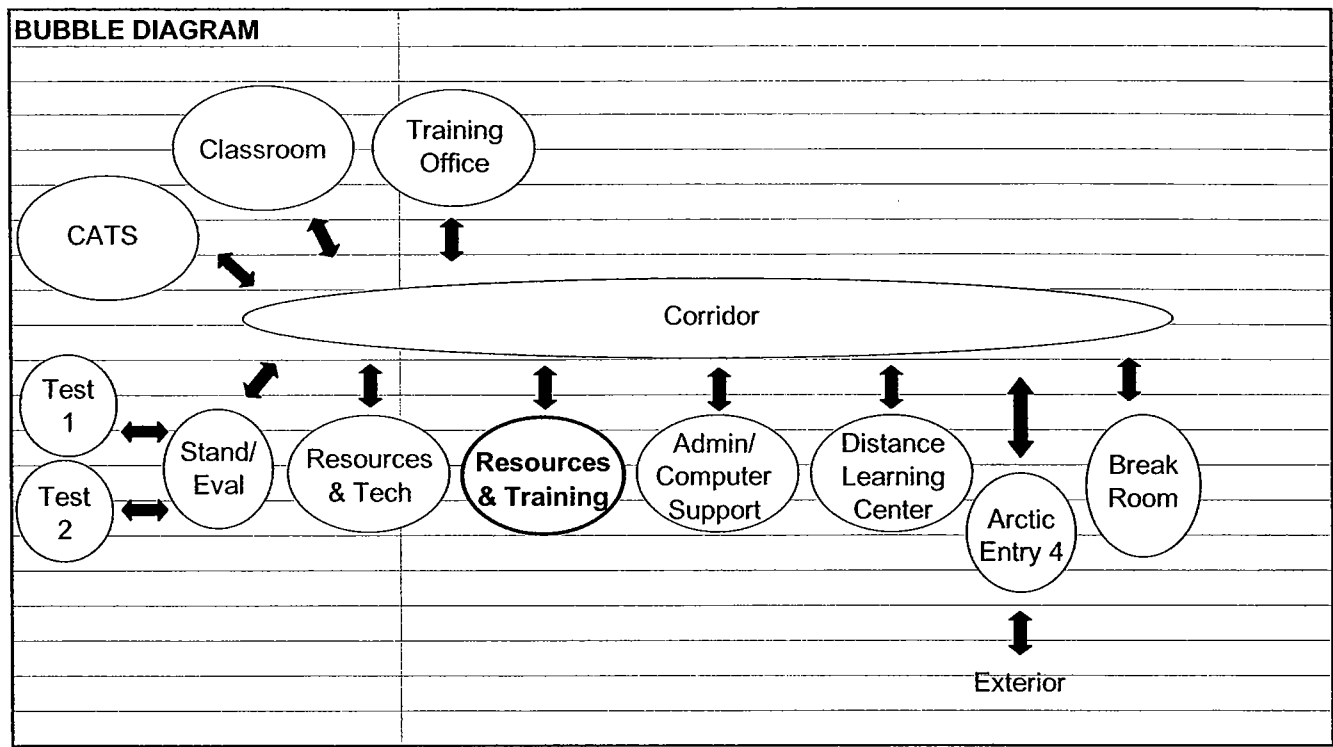
ROOM CRITERIA SHEETS
AD TRAINING - RESOURCES & TECH

ROOM NAME	AD RESOURCES & TECHNICAL SUPPORT OFFICE
Function	Office space for (1) person
Adjacencies	Near Training group (Admin/Computer Support, Break Room, Distance Learning, Resources Training, Stand/Eval, Test Rms 1 & 2, Training); Training group should be near Classroom and CATS
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with mult-level switching
Telecommunication/Data	(3) voice and data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; (1) guest chair
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - RESOURCES & TECH

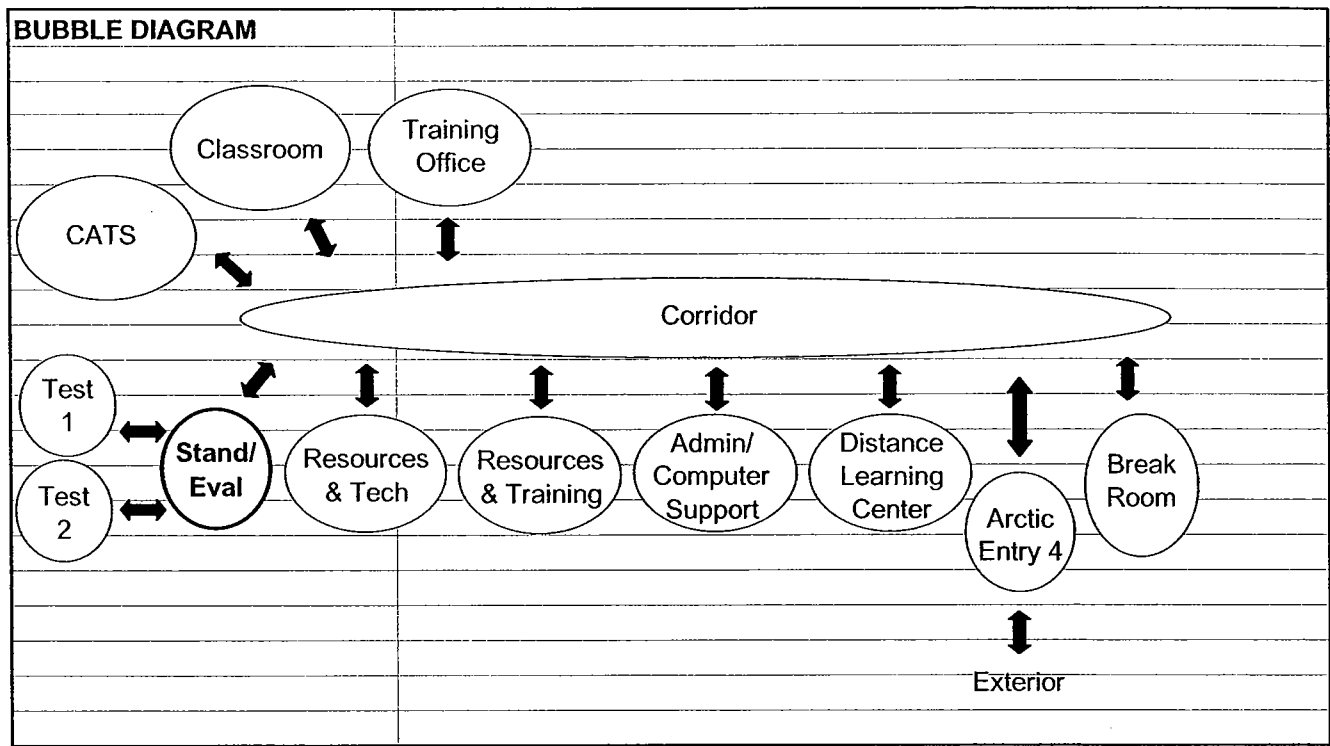
ROOM NAME	AD RESOURCES TRAINING OFFICE
Function	Office space for (1) person
Adjacencies	Near Training group (Admin/Computer Support, Break Room, Distance Learning, Resources & Tech Support, Stand/Eval, Test Rms 1 & 2, Training); Training group should be near Classroom and CATS
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(3) voice and data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; (1) guest chair
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCl: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - STAND-EVAL

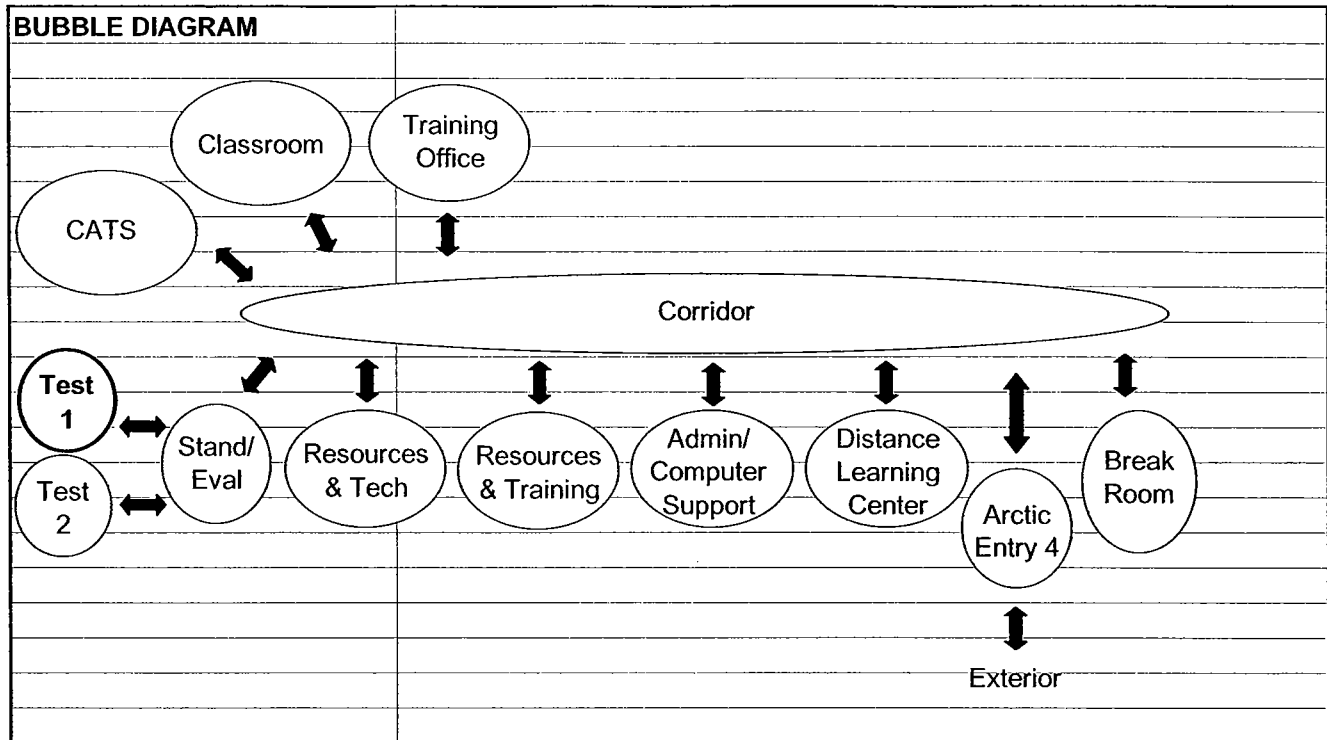
ROOM NAME	AD STANDARDIZATION / EVALUATION OFFICE
Function	Office space for (3) people
Adjacencies	Near Training group (Admin/Computer Support, Break Room, Distance Learning, Resources Training, Resources & Tech Support, Test Rms 1 & 2, Training); Training group should be near Classroom and CATS
Area	18.6 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(3) voice and data ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (3) computers
Furnishings	GFGI: (3) work stations
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - TEST ROOM 1

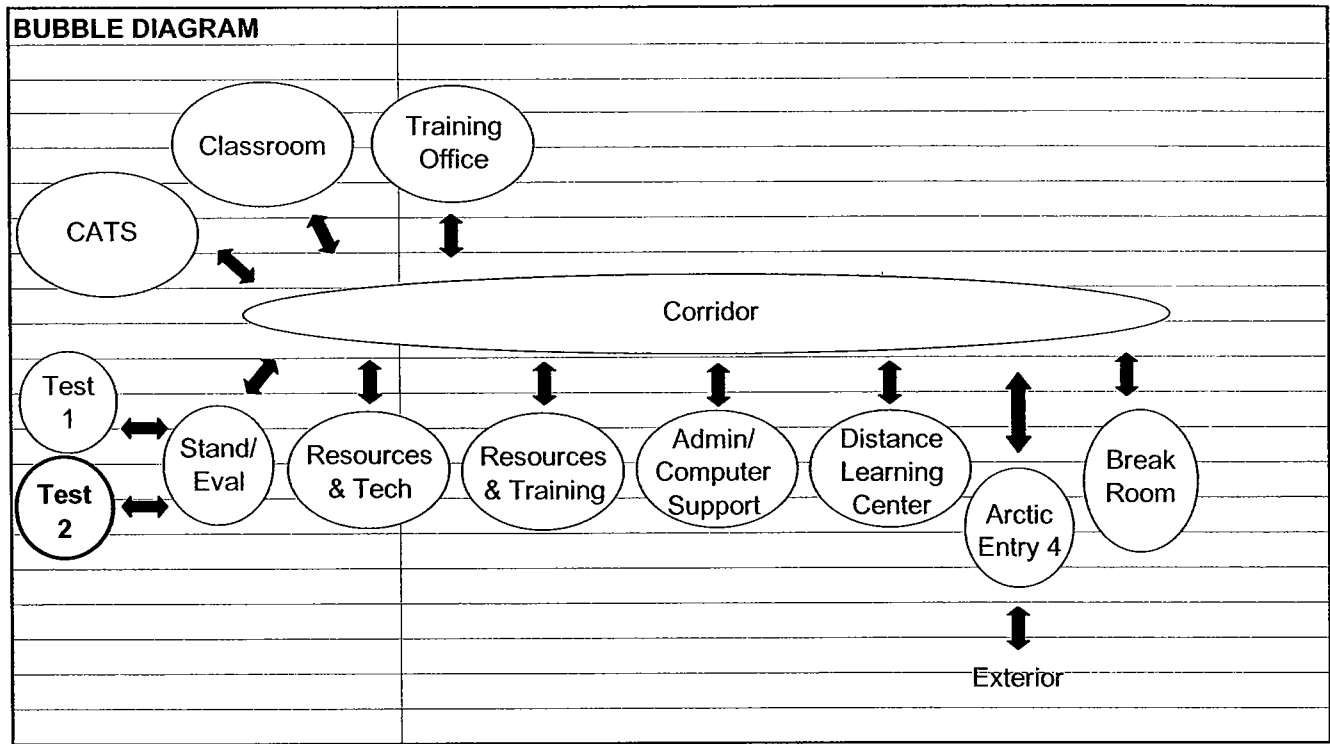
ROOM NAME	AD TEST ROOM 1
Function	Testing
Adjacencies	Standardization/Evaluation; entrance through Standardization/Evaluation
Area	5.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) test cubicles; (2) chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and Stand/Eval; glazed panel in door; sound gasketing
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - TEST ROOM 2

ROOM NAME	AD TEST ROOM 2
Function	Testing
Adjacencies	Standardization/Evaluation; entrance through Standardization/Evaluation
Area	5.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle.
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) test cubicles; (2) chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and Stand/Eval; glazed panel in door; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



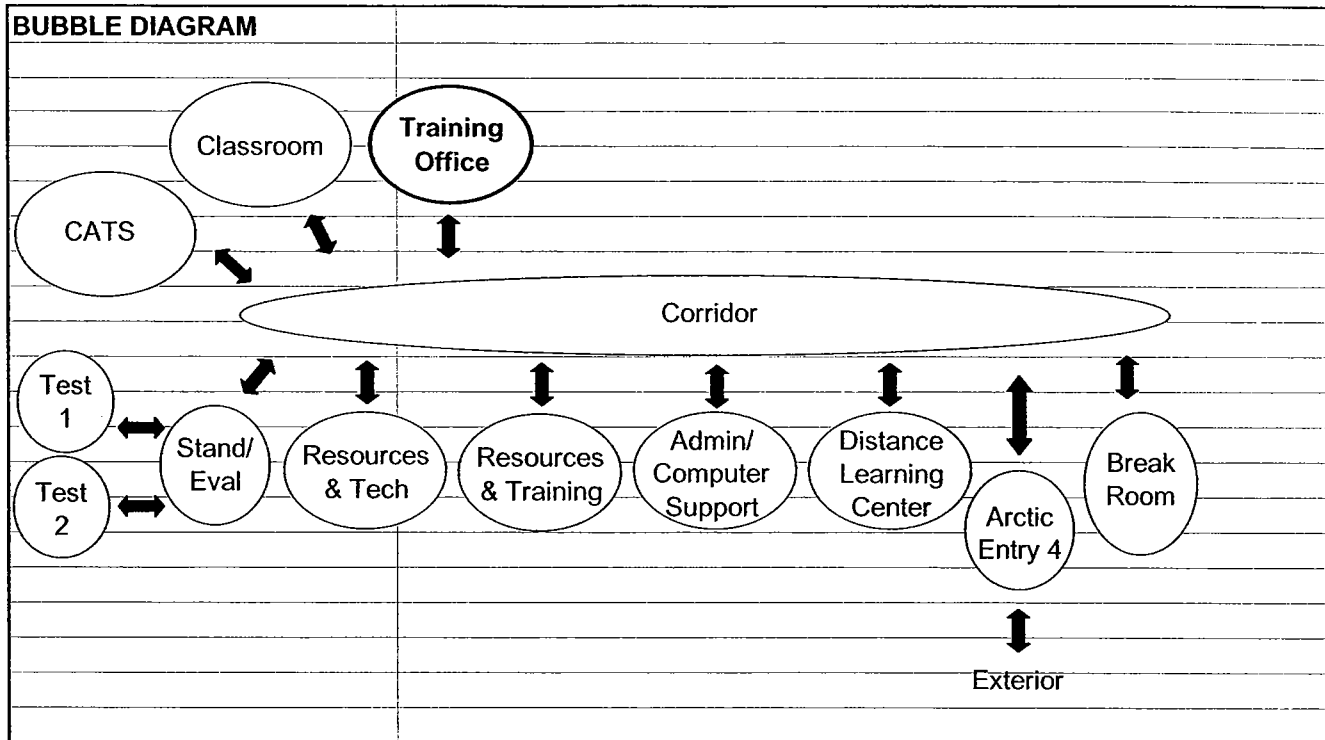
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - TRAINING

ROOM NAME	AD TRAINING OFFICE
Function	Office space for (5) people; utilized for training and instruction
Adjacencies	Near Training group (Admin/Computer Support, Break Room, Distance Learning, Resources Training, Resources & Tech Support, Stand/Eval, Test Rms 1 & 2); Training group should be near Classroom and CATS
Area	41.8 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(4) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (5) computers; 914.4 mm x 1524 mm dry erase board
Furnishings	GFGI: (5) work stations; seating arrangement for (2) people at each work station
Acoustical	STC 62 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
AD TRAINING - TRAINING



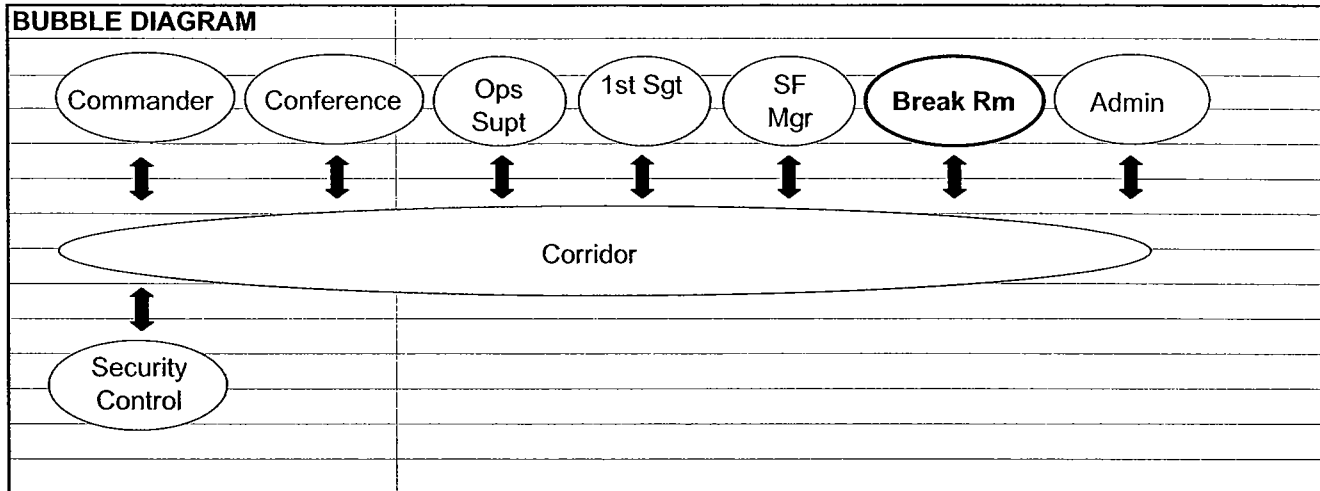
ROOM NAME	ANG ADMINISTRATION OFFICE
Function	Space for reception and supervision of Main Entry; storage of personnel records
Adjacencies	Lobby; near Command staff (Break Room, Commander, Conference, 1st Sgt, Ops Supt, SF Mgr)
Area	46.5 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and two duplex receptacles at each work station
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(5) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	Office supply closet
Casework	None
Security	None
Equipment	GFGI: (3) computers; fax; copier
Furnishings	GFGI: (3) work stations; (2) visitor waiting chairs; (2-3) person visitor waiting couch; systems furniture reception counter between visitor waiting area and admin work area
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired; reception window to Lobby with coiling counter door inside Administration Office (D/B team to verify size with users)
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph LR C([Commander]) <--> Corridor Conf([Conference]) <--> Corridor OS([Ops Supt]) <--> Corridor S1([1st Sgt]) <--> Corridor SM([SF Mgr]) <--> Corridor BR([Break Rm]) <--> Corridor Admin([Admin]) <--> Corridor Admin --- VWA(Visitor waiting area) Admin <--> Lobby([Lobby]) Admin --- PTW(Pass-through window) SC([Security Control]) <--> Corridor </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - BREAK ROOM

ROOM NAME	ANG BREAK ROOM
Function	Space for coffee and lunch breaks
Adjacencies	Near Command staff (Administration, Commander, Conference, 1st Sgt, Ops Supt, SF Mgr)
Area	65 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	(5) duplex receptacles above counter, additional duplex receptacle on each wall
Lighting	Recessed fluorescent
Telecommunication/Data	A telecommunication/data outlet
Plumbing	Double basin stainless steel sink with gooseneck faucet and instant hot water generator with countertop spigot; rough-in for refrigerator with icemaker
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface countertop (1828.8 mm minimum length); cabinets
Security	None
Equipment	GFGI: upright refrigerator with ice maker; microwave oven; 900 mm x 1524 mm dry erase board
Furnishings	GFGI: tables & chairs to seat (25)
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Vinyl composition tile or resilient flooring
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
SPECIAL NOTE	Betterment 2: Add 74.3 square meter ANG Mobility Supply function. Reduce ANG Break Room by 18.6 square meters, from 65 to 46.4 square meters. See Betterment 2 ANG Mobility Supply Room Criteria Sheet.

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - BREAK ROOM

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - COMMANDER

ROOM NAME	ANG COMMANDER'S OFFICE
Function	Office space for Commander
Adjacencies	Near Command staff (Administration, Break Room, Conference, 1st Sgt, Ops Supt, SF Mgr); across hall from Security Control
Area	20.4 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(2) voice ports; (1) SIPR net port, (2) non-secure LAN ports and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: security access control/alarm
Equipment	GFGI: (1) computer; 900 mm x 1524 mm dry erase board
Furnishings	GFGI: (1) work station; (2) guest chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD C((Commander)) <--> Corridor Conf((Conference)) <--> Corridor OS((Ops Supt)) <--> Corridor 1stSgt((1st Sgt)) <--> Corridor SFMgr((SF Mgr)) <--> Corridor BR((Break Rm)) <--> Corridor Admin((Admin)) <--> Corridor Corridor <--> SC((Security Control)) </pre>	

ROOM NAME	ANG CONFERENCE ROOM
Function	Space for (10) person conferencing
Adjacencies	Near Command staff (Administration, Break Room, Commander, 1st Sgt, Ops Supt, SF Mgr)
Area	23.2 SM
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Direct/indirect pendant fluorescent with multi-level switching
Telecommunication/Data	(3) voice ports - wall; (2) voice ports - floor; CCTV raceway; (3) data ports - wall; (2) data ports - floor; (1) data port - ceiling with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: Panasonic TH-50PHD5UY 1270 mm widescreen HD plasma display system or HD wall-mounted TV tied to computer for Power Point, etc. briefings (see Appendix 11); 914.4 mm x 1524 mm dry erase board
Furnishings	(10) person conference table & chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Oak
Walls	Painted GWB; oak chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD C((Commander)) <--> Conf((Conference)) Conf <--> OS((Ops Supt)) OS <--> 1S((1st Sgt)) 1S <--> SFM((SF Mgr)) SFM <--> BR((Break Rm)) BR <--> Admin((Admin)) Conf <--> Corridor Corridor <--> SC((Security Control)) </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - 1st SGT

ROOM NAME	ANG FIRST SERGEANT'S OFFICE
Function	Office space for (1) person; utilized for supervision of unit personnel; counseling
Adjacencies	Near Command staff (Administration, Break Room, Commander, Conference, Ops Supt, SF Mgr)
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer
Furnishings	GFGI: (1) work station; (2) guest chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD C((Commander)) <--> Corridor Conf((Conference)) <--> Corridor OpsSupt((Ops Supt)) <--> Corridor 1stSgt((1st Sgt)) <--> Corridor SFMgr((SF Mgr)) <--> Corridor BreakRm((Break Rm)) <--> Corridor Admin((Admin)) <--> Corridor Corridor <--> SecCtrl((Security Control)) </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

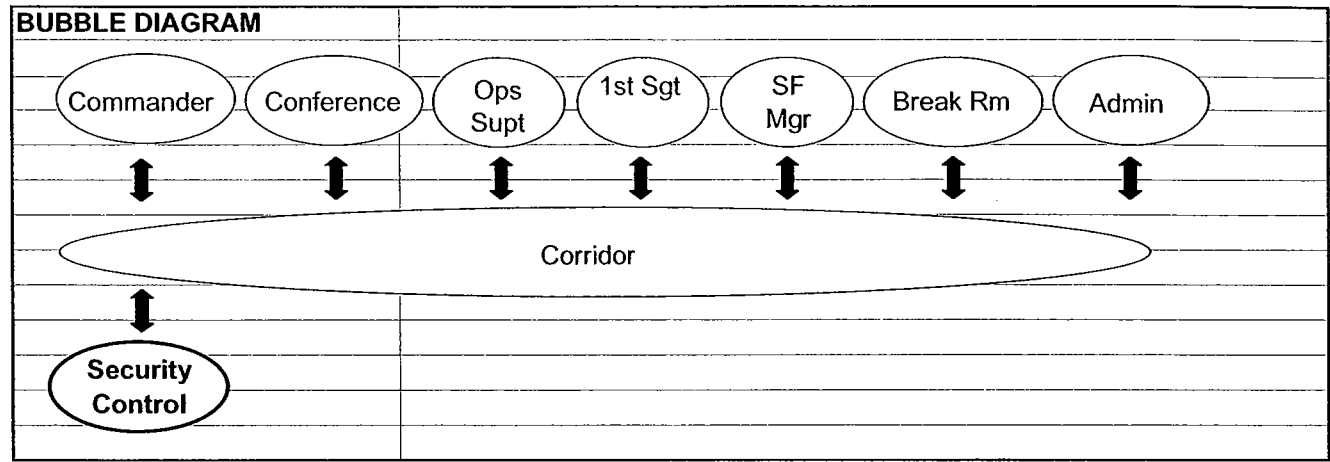
ROOM CRITERIA SHEETS
ANG CMD - OPS SUPT

ROOM NAME	ANG OPERATIONS SUPERINTENDENT'S OFFICE
Function	Office space for (1) person; utilized for scheduling flights; counseling
Adjacencies	Near Command staff (Administration, Break Room, Commander, Conference, 1st Sgt, SF Mgr)
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(3) voice data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer; 900 mm x 1524 mm dry erase board
Furnishings	GFGI: (1) work station; (2) guest chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD subgraph Room C((Commander)) Conf((Conference)) OS((Ops Supt)) ISgt((1st Sgt)) SFMgr((SF Mgr)) BR((Break Rm)) Admin((Admin)) end OS <--> Corridor Corridor <--> SC((Security Control)) C <--> Conf Conf <--> OS OS <--> ISgt ISgt <--> SFMgr SFMgr <--> BR BR <--> Admin </pre> <p>The bubble diagram illustrates the spatial relationships and access points for the ANG Operations Superintendent's Office. At the top, a row of seven ovals represents the room's internal spaces: Commander, Conference, Ops Supt, 1st Sgt, SF Mgr, Break Rm, and Admin. Double-headed vertical arrows connect each of these spaces to a central horizontal oval labeled 'Corridor'. A double-headed vertical arrow also connects the 'Corridor' to an oval labeled 'Security Control' located below it. This diagram indicates that the 'Ops Supt' space is the primary access point to the corridor, which then provides access to the other rooms and the security control area.</p>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - SECURITY CTRL

ROOM NAME	ANG SECURITY CONTROL
Function	Command post; control center for primary state emergency services communications, Homeland Security communications and Clear & Greely communications
Adjacencies	Across hall from ANG Commander's Office; no exterior walls
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacle on each wall a dedicated power strip and circuits for consoles
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(10) voice ports; (4) SIPR net ports, (10) non-secure LAN ports, (2) 101.6 mm conduit radio antenna feeds from side of building and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: built-in work station with angled console per ANG requirements (D/B team shall verify requirements with ANG)
Security	GFGI: secured access; electronically controlled door; intercoms; control and monitoring of all interior and exterior cameras at site with the exception of cameras in Corridor recording activity from Parking Garage to Patrolman's Office, Interview Rooms 1 & 2 and Data Master's Office and cameras within those rooms (the aforementioned shall be controlled/monitored in AD Control Center only); cameras must have pan/tilt/zoom and audio/video recording capability (Option 4)
Equipment	None
Furnishings	None
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Heavy man-door 900 mm x 2100 mm; peephole; cypher lock; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG CMD - SECURITY FORCES MGR

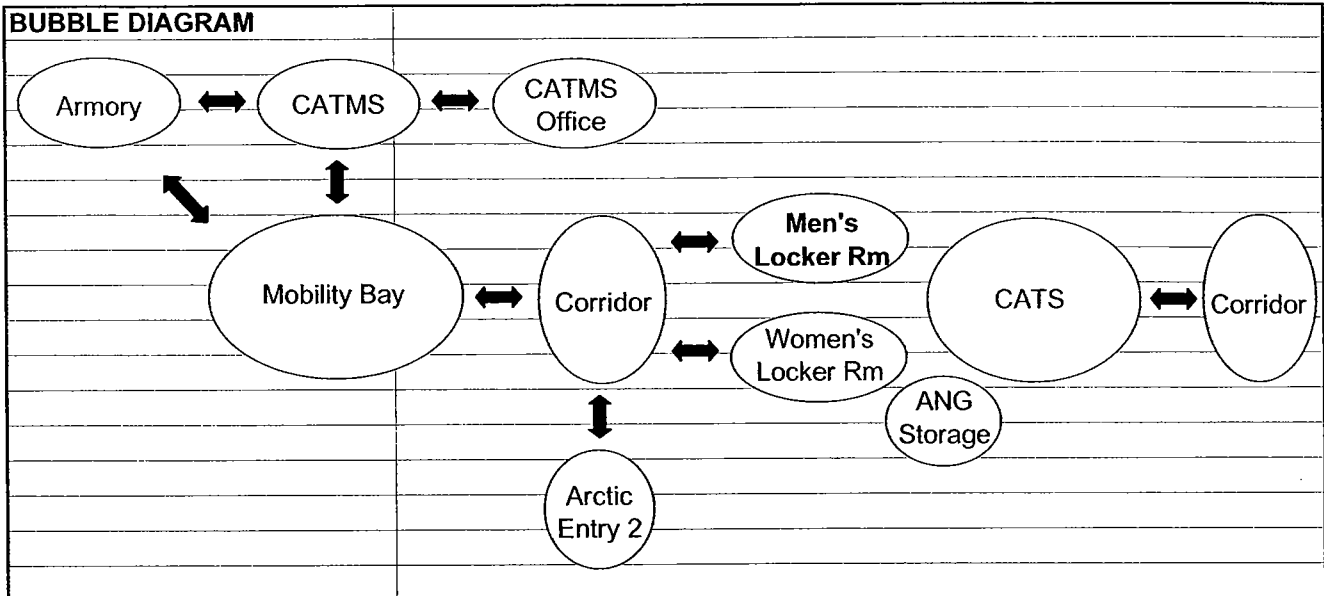
ROOM NAME	ANG SECURITY FORCES MANAGER'S OFFICE
Function	Office space for (1) person; Security Forces Mgr oversees all programs within squadron; second in command to Captain
Adjacencies	Near Command staff (Administration, Break Room, Commander, Conference, 1st Sgt, Ops Supt); near Security Control
Area	13.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (1) computer; 914.4 mm x 1524 mm dry erase board
Furnishings	GFGI: (1) work station; (2) guest chairs
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
<pre> graph TD Commander --- Corridor Conference --- Corridor OpsSupt[Ops Supt] --- Corridor 1stSgt[1st Sgt] --- Corridor SFMgr[SF Mgr] --- Corridor BreakRm[Break Rm] --- Corridor Admin --- Corridor Corridor --- SecurityControl[Security Control] </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG GEN USE - MEN'S LOCKERS

ROOM NAME	ANG MEN'S LOCKER ROOM
Function	Washroom; showers; locker storage for crew gear
Adjacencies	Mobility Bay; near Arctic Entry 2, CATS, ANG Storage, Women's Locker Room
Area	As needed to support functions
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture (wet service), surface mounted wrap type fluorescent fixtures (wet service) on ceiling
Telecommunication	None
Data	None
Plumbing	(5) single shower stalls [(1) shower stall shall be ADAAG and UFAS compliant]; (3) wall-mounted water closets; (3) wall-mounted urinals; (3) lavatories installed in solid surface counters; floor drain(s)
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fans
SPECIAL REQUIREMENTS	
Storage	CFCI: (60) metal lockers 609.6 mm wide x 914.4 mm deep x 1524 mm high; single tier
Casework	CFCI: solid surface vanity countertop (1525 mm minimum length)
Security	None
Equipment	None
Furnishings	CFCI: toilet partitions; benches; accessories: coat hooks; full-length mirror; paper towel dispenser/receptacle; shower rod/curtain/hooks; soap dispensers; toilet tissue dispensers; vanity mirrors
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliance
Door	No door from Corridor; minimum 1219.2 mm wide opening; standard man-door 900 mm x 2100 mm between locker area and toilet area; cypher lock; sound gasketting
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot; full height ceramic tile at showers
Wainscot	1524 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

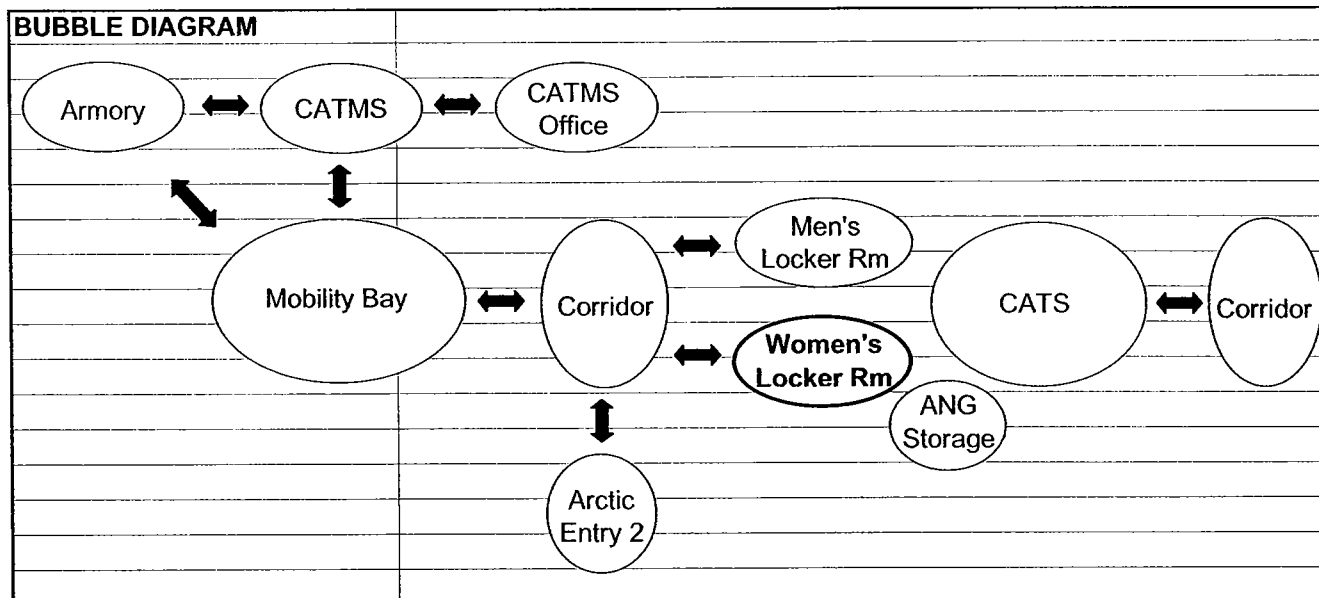
ROOM CRITERIA SHEETS
ANG GEN USE - MEN'S LOCKERS

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG GEN USE - WOMEN'S LOCKERS

ROOM NAME	ANG WOMEN'S LOCKER ROOM
Function	Washroom; showers; locker storage for crew gear
Adjacencies	Mobility Bay; near Arctic Entry 2, CATS, ANG Storage, Men's Locker Room
Area	As needed to support functions
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture (wet service), surface mounted wrap type fluorescent fixtures (wet service) on ceiling
Telecommunication	None
Data	None
Plumbing	(1) 914.4 mm x 914.4 mm ADAAG and UFAS compliant shower stall; (2) wall-mounted water closets; (2) lavatories installed in solid surface counters; floor drain(s)
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fans
SPECIAL REQUIREMENTS	
Storage	CFCI: (13) metal lockers 609.6 mm wide x 914.4 mm deep x 1524 mm high; single tier
Casework	CFCI: solid surface vanity countertop (1525 mm minimum length)
Security	None
Equipment	None
Furnishings	CFCI: toilet partitions; benches; accessories: coat hooks; full-length mirror; paper towel dispenser/receptacle; sanitary napkin/tampon dispenser; sanitary napkin/tampon disposal; shower rod/curtain/hooks; soap dispensers; toilet tissue dispensers; vanity mirrors
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliance
Door	No door from Corridor; minimum 1219.2 mm wide opening; standard man-door 900 mm x 2100 mm between locker area and toilet area; cypher lock; sound gasketting
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot; full height ceramic tile at showers
Wainscot	1524 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG GEN USE - WOMEN'S LOCKERS

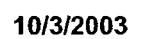
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG MOBILITY - ARMORY

ROOM NAME	ANG ARMORY VAULT
Function	Space for secure weapons/munitions storage and issue; inventory control; weapons repairs
Adjacencies	CATMS; Mobility Bay; entrance through CATMS
Area	46.5 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, additional receptacles/strip at issue counter and repair bench
Lighting	Recessed fluorescent or surface wraps as dictated by ceiling type
Telecommunication/Data	Provide a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust Fan
SPECIAL REQUIREMENTS	
Storage	CFCI: 1193.8 mm high x 261.6 mm deep x 1587.5 mm wide M11 rack (see Appendix 11); GFGI: (2) cabinets
Casework	None
Security	High-security lock (MIL-P-43607) per MIL-HDBK 1013/1A Table 14; GFGI: camera in Corridor for surveillance of entrance door to Armory with control/monitoring in ANG Armory Vault, ANG Security Control and AD
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	Build Armory per MIL-HDBK-1013/1A Table 14
Door	Armory door shall be a Class 5 vault door per MIL-HDBK-1013/1A Table 14
Window	CFCI: 1016 mm x 1016 mm weapons issue window from Armory into Mobility Bay with coiling counter doors inside Armory (see Appendix 11)
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Sealed concrete
Ceiling	Sealed concrete
Window Treatment	N/A

ROOM CRITERIA SHEETS

ANG MOBILITY - ARMORY



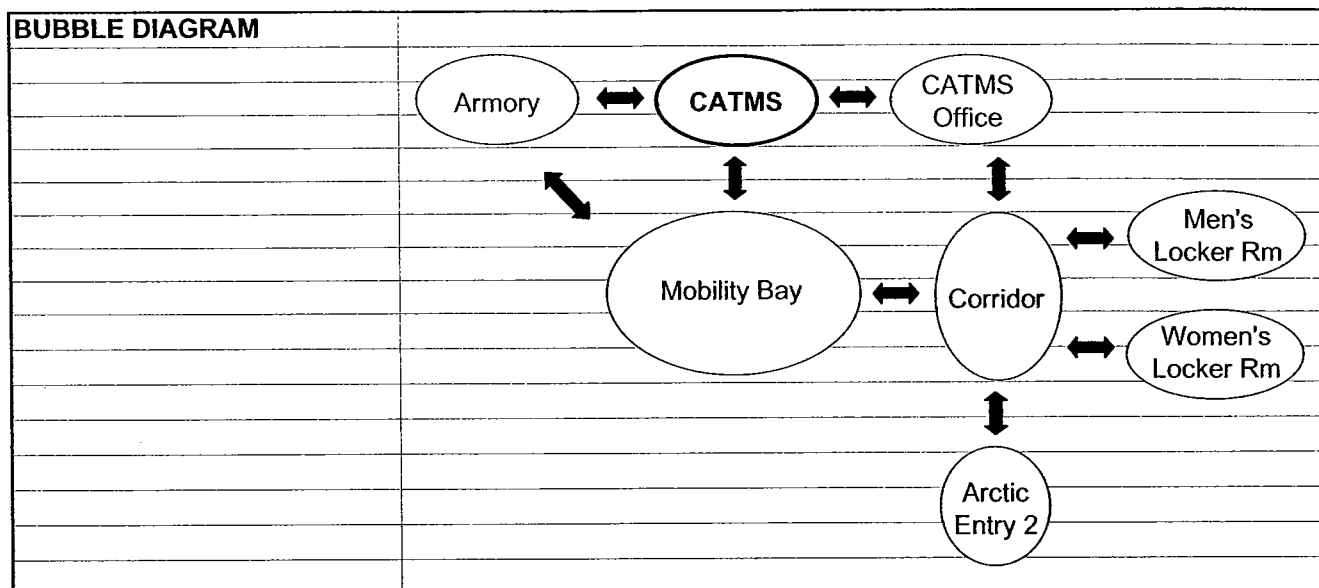
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG MOBILITY - CAT MAINT SHOP

ROOM NAME	ANG COMBAT ARMS TRAINING MAINTENANCE SHOP (CATMS)
Function	Space for small arms maintenance/weapons repair
Adjacencies	Direct access to Armory, Mobility Bay, CATMS Office; entrance through CATMS Office and Mobility Bay
Area	32.5 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, additional receptacles/strip at issue counter and repair bench
Lighting	Recessed fluorescent or surface wraps as dictated by ceiling type
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	Janitor sink
Heating	Provide system to satisfy design criteria
Ventilation	CFCI: ceiling fan
Shop Compressed Air	Drop
SPECIAL REQUIREMENTS	
Storage	None
Casework	GFGI: cabinets for parts bins
Security	GFGI: security access control/alarm
Equipment	GFGI: partswasher and weapons cleaning system (see Appendix 11)
Furnishings	CFCI: (2) stainless steel repair benches bolted to wall; minimum length 1524 mm each
Acoustical	STC 62 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm between this room and CATMS Office; office function lockset; sound gasketing; double man-door 1800 mm x 2100 mm between this room and Mobility Bay; glazed panel in doors; office function lockset; sound gasketing
Window	None
FINISHES	
Floor	Sealed concrete appropriate for weapons maintenance solvents, etc.
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A

ROOM CRITERIA SHEETS

ANG MOBILITY - CAT MAINT SHOP

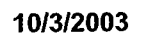


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG MOBILITY - CATMS OFFICE

ROOM NAME	ANG COMBAT ARMS TRAINING MAINTENANCE SHOP (CATMS) OFFICE
Function	Office space for (2) people; utilized for lesson planning, meetings, storage of training records
Adjacencies	CATMS; Corridor
Area	27.9 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and and additional duplex receptacle for each person
Lighting	Recessed fluorescent with mult-level switching
Telecommunication/Data	A minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: (4) 4-drawer file cabinets
Casework	None
Security	None
Equipment	GFGI: (2) computers
Furnishings	GFGI: (2) work stations; (2) guest chairs
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds

ROOM CRITERIA SHEETS
ANG MOBILITY - CATMS OFFICE

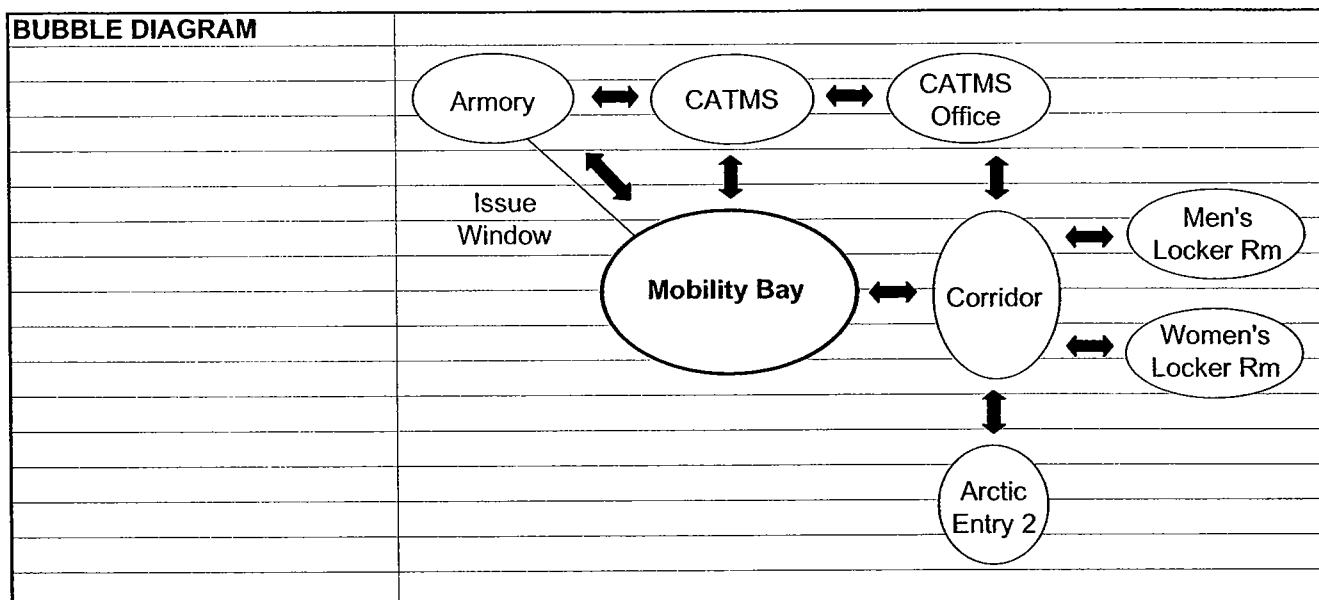



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG MOBILITY - MOBILITY BAY

ROOM NAME	ANG MOBILITY BAY
Function	Space for mobility flight supply; mobility pallet assembly; pallet loading on and unloading from vehicles for transport; unit assembly area; equipment storage; storage for (6) ATVs, (2) vehicles, (1) 2.5 ton 6-pack truck, 10K lb forklift; filling tires on vehicles; laundering rags
Adjacencies	Access to CATMS; Corridor; near Locker Rooms, Arctic Entry 2
Area	371.6 SM; rectangular plan
Minimum Ceiling Height	6096 mm to lowest obstruction
BUILDING SYSTEMS	
Electrical	A duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, special receptacles or hardwired for washer/dryer
Lighting	4-lamp industrial fluorescent, T5 HO lamps or equivalent facilitation
Telecommunication/Data	Provide a minimum of a telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	CFCI: floor mounted janitor sink; rim guard; faucet with wall brace; vacuum breaker; bucket hook; washer/dryer hook-ups; trench drain with 100 gal minimum evaporative pit
Heating	Separate air handling unit to provide heat and outside air for the room operation. See RFP for system specifics.
Ventilation	Included in the heating above.
Shop Compressed Air	(2) drops adjacent to Armory issue window & vehicle maintenance area
Fire Protection	Protect sprinkler heads from freezing or provide separate dry zone
SPECIAL REQUIREMENTS	
Storage	GFGI: (2) Pallet Racks (Option 2) (see Appendix 11)
Casework	None
Security	None
Equipment	GFGI: (6) 2235.2 mm x 2743.2 mm x 2438.4 mm cargo pallets; washer; dryer
Furnishings	GFGI: bench stock; shelving
Acoustical	STC 62 to adjacent spaces
Life Safety	Emergency eyewash
Door	Sectional overhead door 4876.8 mm x 4876.8 mm pull-through configuration; standard man-door 900 mm x 2100 mm to exterior; double man-door 1800 mm x 2100 mm to Corridor; sound gasketting to interior
Window	None
FINISHES	
Floor	Sealed concrete
Base	None
Walls	Paint, lightest color practical; gloss finish
Wainscot	Desired; D/B team shall spec high-impact resistant material; no wood; must meet flammability requirements; up to 2438.4 mm above floor
Ceiling	Exposed to structure, painted, acoustical roof deck
Window Treatment	N/A


ROOM CRITERIA SHEETS
ANG MOBILITY - MOBILITY BAY



ROOM NAME	ANG LEARNING CENTER
Function	Space for individual book and computer study for (4) recruits
Adjacencies	Resources Office; entrance through Resources Office
Area	18.6 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(4) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (4) computers
Furnishings	GFGI: (4) training carrels
Acoustical	STC 52 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; between this room and Resources Office; glazed panel in door; sound gasketing
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	Sun control and blackout capabilities
BUBBLE DIAGRAM	
 <pre> graph LR LC((Learning Center)) <--> RO((Resources Office)) RO <--> C((Corridor)) </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
ANG RESOURCES - RESOURCES OFC

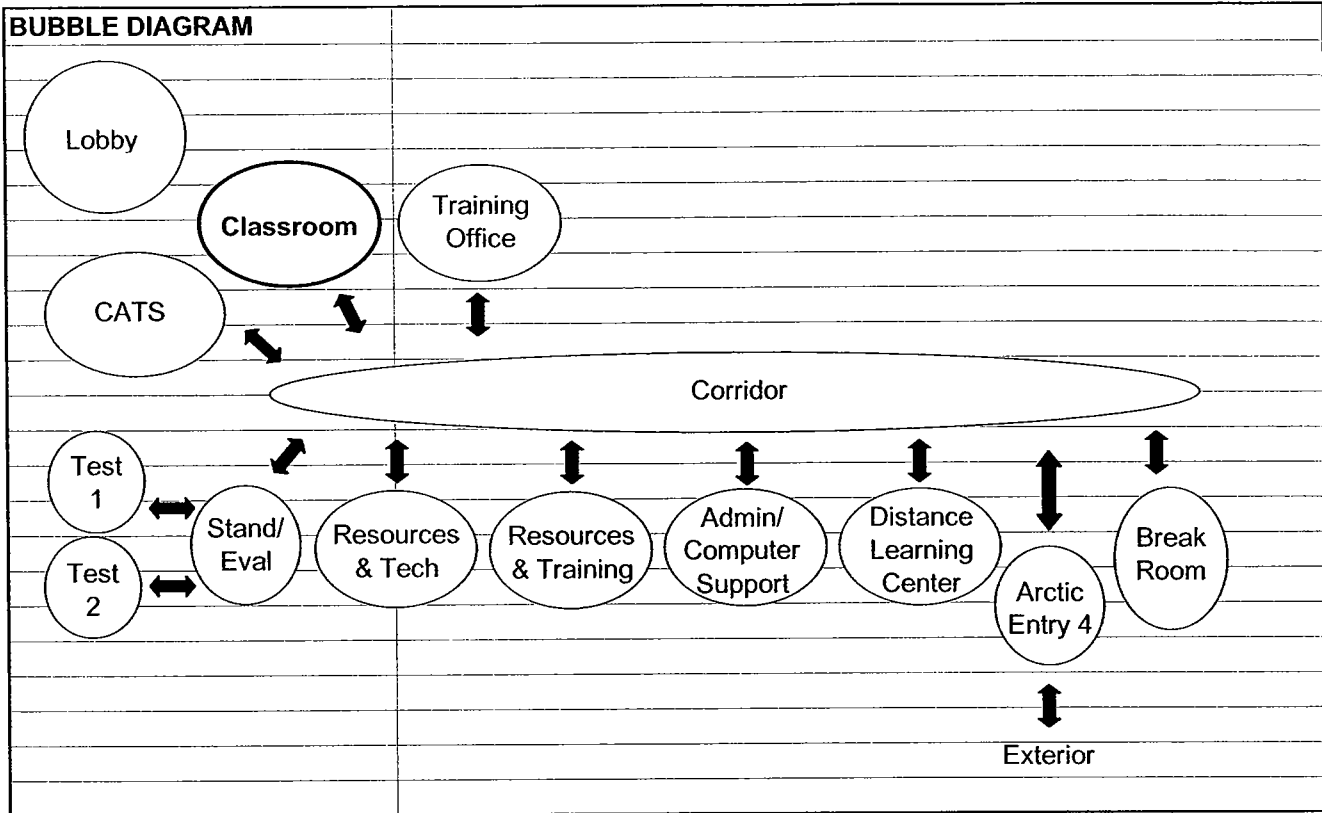
ROOM NAME	ANG RESOURCES OFFICE
Function	Office space for (6) people; utilized for management of mobility operations, supply and training, records maintenance
Adjacencies	Learning Center; Betterment 2: ANG Mobility Supply; see Betterment 2 ANG Mobility Supply Room Criteria Sheet.
Area	46.5 SM; 9.29 SM (1524 mm x 6096 mm) storage closet within Resources Office on wall shared with Learning Center
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall and an additional duplex receptacle for each person
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(4) voice and data ports with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	Closet for storage of training supplies and equipment
Casework	None
Security	None
Equipment	GFGI: (6) computers
Furnishings	GFGI: (6) work stations; (1) guest chair
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	CFCI: Louvered blinds
BUBBLE DIAGRAM	
 <pre> graph LR LC([Learning Center]) <--> RO([Resources Office]) RO <--> C([Corridor]) </pre>	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
SHARED - CLASSROOM

ROOM NAME	CLASSROOM
Function	Shared space for training, in-house briefing
Adjacencies	Centrally located; near Training Section
Area	185.8 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacles on 3658 mm centers
Lighting	Recessed fluorescent (multi-level/dimmable)
Telecommunication/Data	(3) voice ports - wall, (2) voice ports - floor, CCTV raceway, local PA; (3) data ports - wall, (2) data ports - floor, (1) data port - ceiling, (2) data ports - podium (1 ea side of front of room) and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle.
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: (2) ceiling mounted video projection systems; 914.4 mm x 1524 mm dry erase board; CFCI: conduit & bracing in ceiling for projection screen and sound system; (2) 2438.4 mm wide x 2133.6 mm high concealed motorized projection screens
Furnishings	GFGI: tables and chairs to seat (73) people; portable podium
Acoustical	STC 62 to adjacent spaces
Life Safety	None
Door	Standard man-door(s) 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	Operable windows desired
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	Sun control and blackout capabilities
SPECIAL NOTE	Betterment 1: Add 162 person Lecture Hall. Eliminate Shared Classroom. See Betterment 1 Lecture Hall Room Criteria Sheet.

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

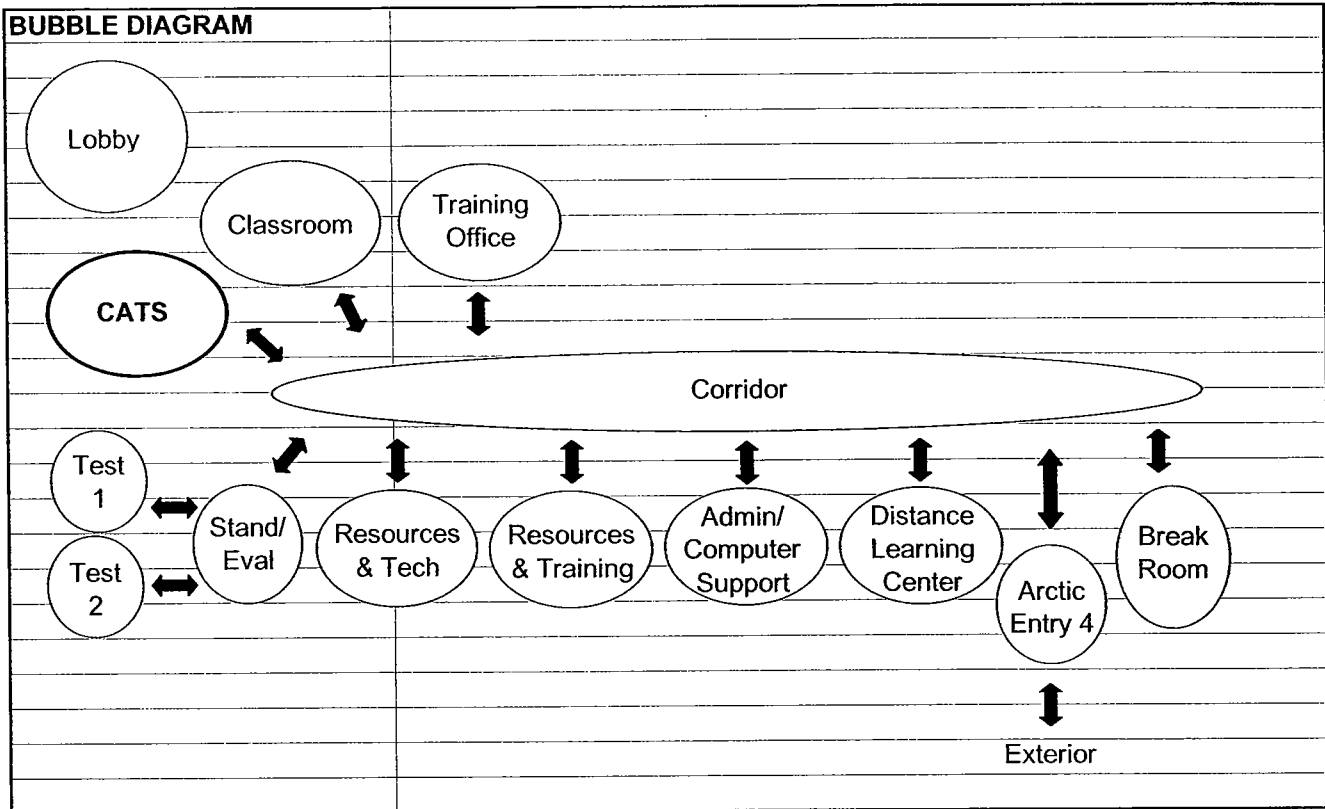
ROOM CRITERIA SHEETS
SHARED - CLASSROOM

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
SHARED - CATS ROOM

ROOM NAME	COMBAT ARMS TRAINING SIMULATION (CATS) ROOM
Function	Shared space for computerized weapons training system, and associated class space for 1 instructor and 5 students
Adjacencies	Centrally located; near Training Section
Area	139.4 SM; Control Room within area 7.4 SM; refer to Appendix 11 for minimum dimensions
Minimum Ceiling Height	3657.6 mm minimum
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers - additional power and J-boxes for specific equipment requirements
Lighting	Recessed fluorescent (multi-level/fully dimmable with lighting controller)
Telecommunication/Data	(3) voice ports; (6) data ports; cable tray system under floor for CATS equipment cabling and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	GFGI: 12 lanes, 3 projector systems (see Appendix 11); 914.4 mm x 1524 mm dry erase board; allow for carbon dioxide tank storage
Furnishings	None
Acoustical	STC 62 to adjacent spaces; sound attenuation within the room; very noisy area
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	CFCI: raised computer access floor system for raised platform projector and Control Room (see Appendix 11) with carpet tiles on raised platform; carpet in remainder of space; access floor system shall allow for power and gas lines to come from below and attach to arms
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	N/A

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
SHARED - CATS ROOM

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

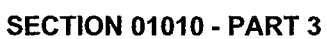
ROOM CRITERIA SHEETS
CIRCULATION - ARCTIC ENTRY 1

ROOM NAME	PUBLIC ARCTIC ENTRY 1
Function	Main entry point to Facility; reduce heat loss; shed tracked dirt, snow and water
Adjacencies	Exterior; Lobby
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Misc. power as required
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	1 voice outlet
Data	None
Plumbing	None
Heating	Provide a separate zone for this entry
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: camera for surveillance of Arctic Entry exterior door with control/monitoring in AD Control Center and ANG Security Control (Option 4); electronic entry controls terminating at AD Control Center; override with keypad entry at each Arctic Entry point
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	None
Door	(2) sets insulated glass man-doors 1800 mm x 2100 mm; transom or sidelites optional; no locks on Lobby doors
Window	None
FINISHES	
Floor	Vinyl composition tile; walk-off mat
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	None
BUBBLE DIAGRAM	
	Exterior
	↑
	Arctic Entry 1
	↓
	Lobby

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
CIRCULATION - ARCTIC ENTRY 2

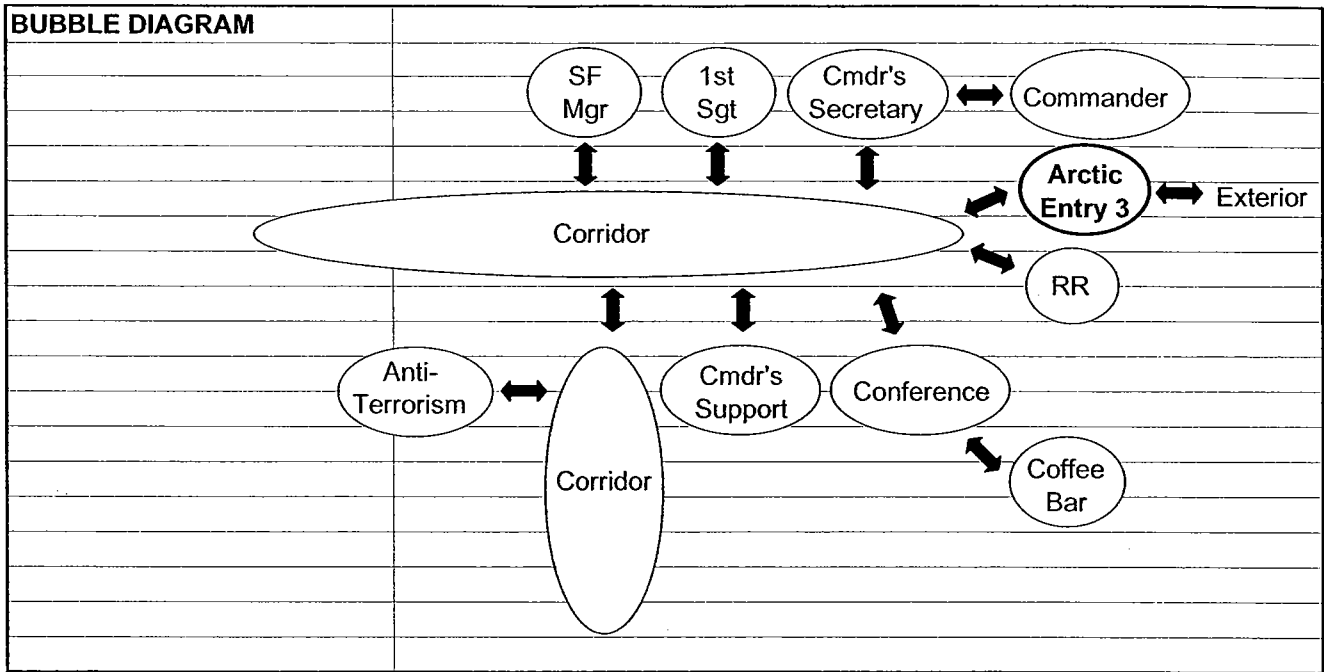
ROOM NAME	ANG ARCTIC ENTRY 2
Function	Entry point to ANG Locker Rooms, Corridor; reduce heat loss; shed tracked dirt, snow and water
Adjacencies	Exterior; Corridor; near ANG Locker Rooms, ANG Mobility Bay
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Misc. power as required
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	1 voice outlet
Data	None
Plumbing	None
Heating	Provide a separate zone for this entry
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: camera for surveillance of Arctic Entry exterior door with control/monitoring in AD Control Center and ANG Security Control (Option 4); electronic entry controls terminating at AD Control Center; override with keypad entry at each Arctic Entry point
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	None
Door	Standard man-doors 900 mm x 2100 mm with insulated glass vision panel; transom or sidelites optional
Window	None
FINISHES	
Floor	Vinyl composition tile; walk-off mat
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
CIRCULATION - ARCTIC ENTRY 3

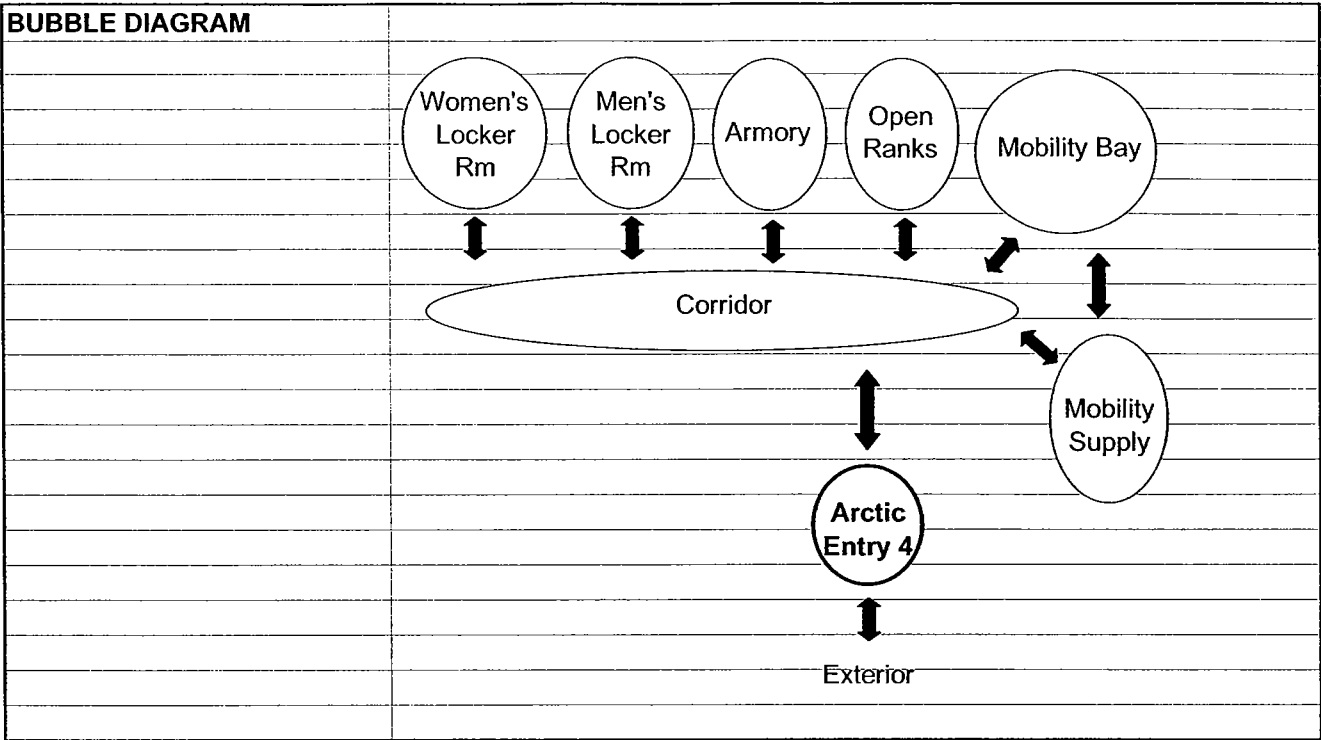
ROOM NAME	AD ARCTIC ENTRY 3
Function	Entry point to AD Commander's area; reduce heat loss; shed tracked dirt, snow and water
Adjacencies	Exterior; Corridor; AD Commander's Office
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Misc. power as required
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	1 voice outlet
Data	None
Plumbing	None
Heating	Provide a separate zone for this entry
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: camera for surveillance of Arctic Entry exterior door with control/monitoring in AD Control Center and ANG Security Control (Option 4); electronic entry controls terminating at AD Control Center; override with keypad entry at each Arctic Entry point
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	None
Door	Standard man-doors 900 mm x 2100 mm with insulated glass vision panel; transom or sidelites optional
Window	None
FINISHES	
Floor	Vinyl composition tile; walk-off mat
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
CIRCULATION - ARCTIC ENTRY 4

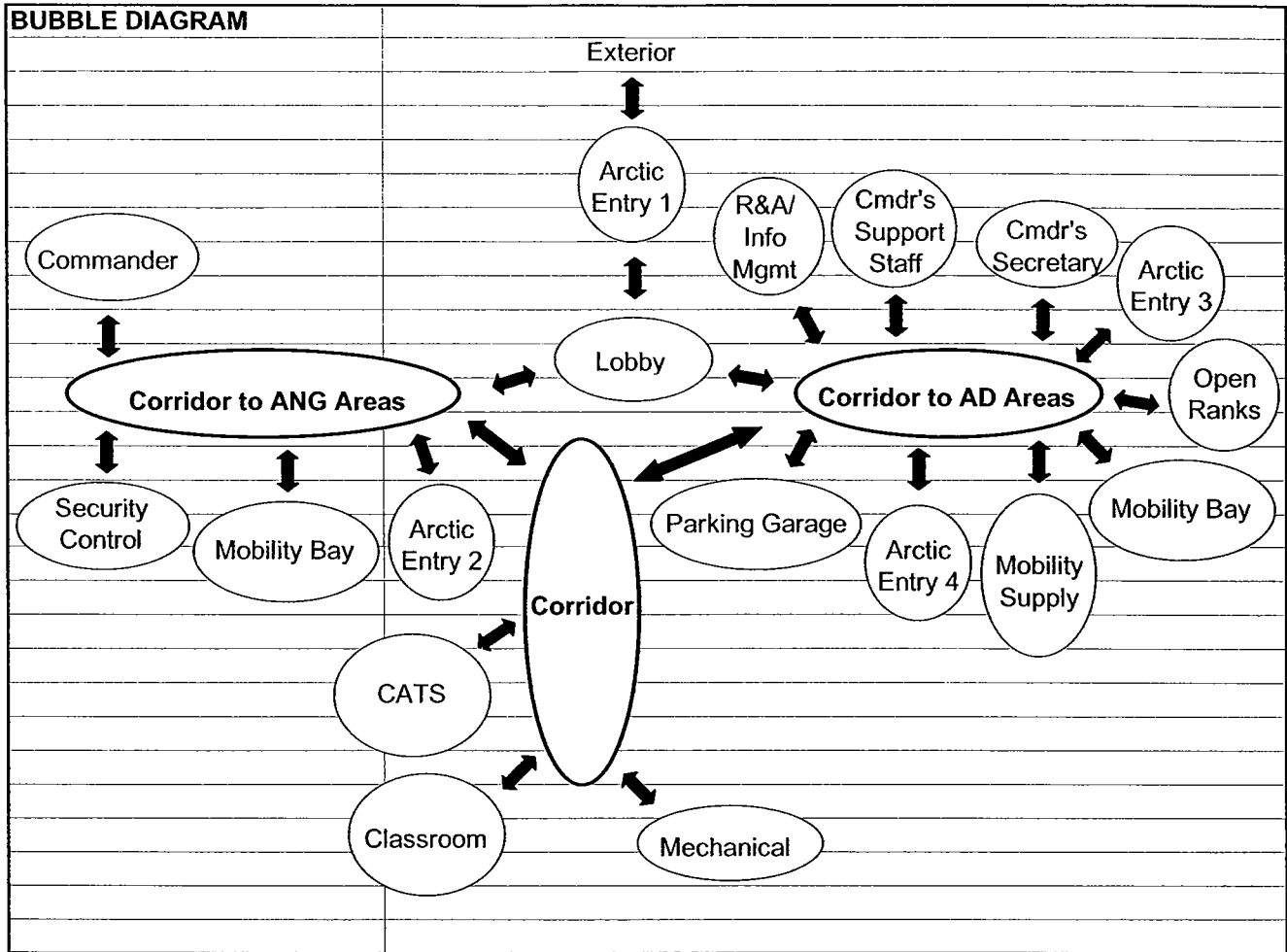
ROOM NAME	AD ARCTIC ENTRY 4
Function	Entry point Mobility area; reduce heat loss; shed tracked dirt, snow and water
Adjacencies	Exterior; Corridor; near Open Ranks, AD Locker Rooms
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Misc. power as required
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	1 voice outlet
Data	None
Plumbing	None
Heating	Provide a separate zone for this entry
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: camera for surveillance of Arctic Entry exterior door with control/monitoring in AD Control Center and ANG Security Control (Option 4); electronic entry controls terminating at AD Control Center; override with keypad entry at each Arctic Entry point
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	None
Door	Standard man-doors 900 mm x 2100 mm with insulated glass vision panel; transom or sidelites optional
Window	None
FINISHES	
Floor	Vinyl composition tile; walk-off mat
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	N/A



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
CIRCULATION - CORRIDOR

ROOM NAME	CORRIDOR
Function	Circulation
Adjacencies	Lobby; AD Commander's Secretary, Commander's Support Staff, Mobility Bay, Mobility Supply, Open Ranks, Parking Garage Reoprts & Analysis/Information Management; ANG Commander's Office, Mobility Bay, Security Control; Shared Classsroom, CATS; Mechanical Room; as needed to support functions
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
Width	1981.2 mm clear width preferred; 1524 mm clear width minimum in lower traffic areas
BUILDING SYSTEMS	
Electrical	Duplex receptacles 6100 mm on center
Lighting	Recessed fluorescent
Telecommunication	None
Data	None
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	Secure doors to Lobby, secured access control - integrate with security cameras & audio/video recording system; GFGI: audio/video coverage in Corridor to record all activity from Parking Garage to Patrolman's Office, Interview Rooms 1 & 2 and Data Master's Office, controlled/monitored in AD Control Center only (Option 4)
Equipment	None
Furnishings	None
Acoustical	As needed for adjacent spaces
Life Safety	ABC Fire Extinguisher
Door	Double man-doors 1800 mm x 2100 mm in Corridor to separate AD Commander's area from other areas; pass-through circulation of other building occupants through Command staff area is not allowed
Window	Operable windows desired
FINISHES	
Floor	Vinyl composition tile or resilient sheet flooring
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	Louvered blinds

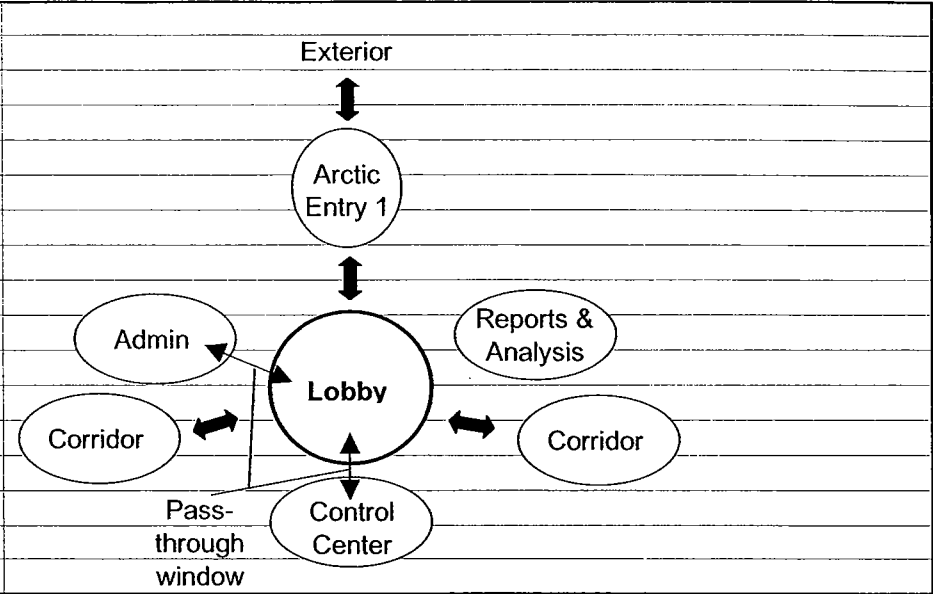


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
CIRCULATION - LOBBY

ROOM NAME	LOBBY
Function	Circulation
Adjacencies	Arctic Entry 1; ANG Administration; AD Reports & Analysis; Control Center; Corridor
Area	As needed to support functions
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent
Telecommunication	(2) voice ports; telephones to call building occupants
Data	(2) data ports
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	Secured access control - integrate with security cameras & audio/video recording system; GFGI: camera for surveillance of door to ANG wing of facility with control/monitoring in AD Control Center and ANG Security Control and ANG Administration Office (Option 4); electronic entry controls terminating at ANG Administration Office
Equipment	None
Furnishings	None
Acoustical	STC 47 to adjacent spaces
Life Safety	ABC Fire Extinguisher
Door	Solid man-doors 1066.8 mm x 2100 mm into Corridors (one door to AD wing; one door to ANG wing); ballistic glass view panel in doors; sound gasketting
Window	None
FINISHES	
Floor	Vinyl composition tile or resilient sheet flooring
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	N/A

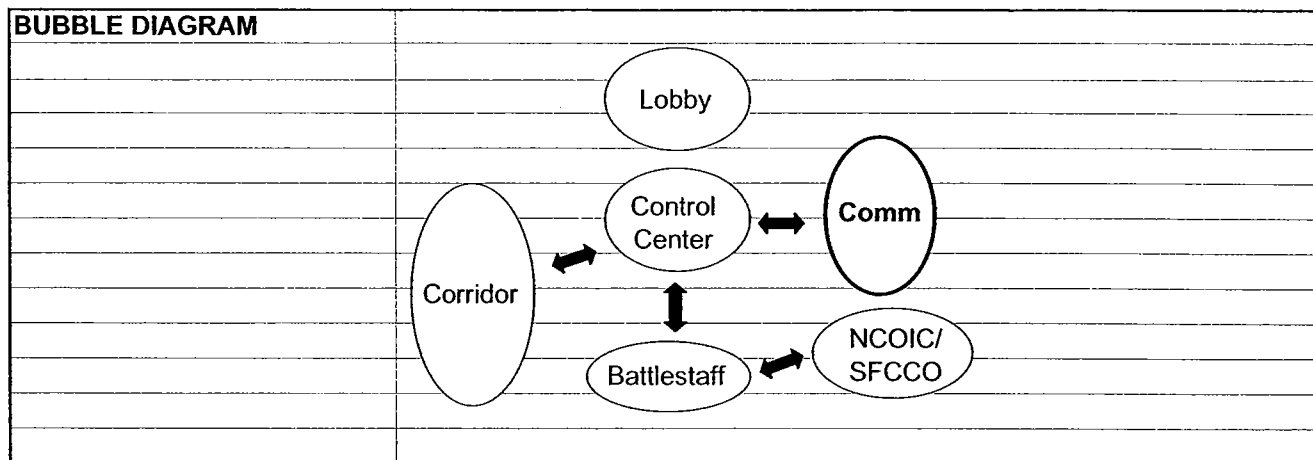
BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
UTILITY - COMMUNICATIONS

ROOM NAME	COMMUNICATIONS ROOM
Function	Shared space to house patch panels and classified network
Adjacencies	Control Center; Battlestaff; NCOIC/SFCCO; entrance through Control Center
Area	27.9 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers; double duplex at all data racks; UPS
Lighting	Recessed fluorescent
Telecommunication/Data	(4) fixed voice ports, mass notification, classified phone system and enhanced 911 system equipment; SIPR net ports/rack/equipment, (4) fixed non-secure LAN ports/racks/equipment, (2) 102 mm conduits for radio antenna drops from exterior of building and a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Provide separate cooling system for Battlestaff, Communications, Control Center and NCOIC/SFCCO
Fire Protection	Provide a local pre-action zone to be monitored by occupants
SPECIAL REQUIREMENTS	
Storage	CFCI: lockable, alarmed 2133.6 mm x 3048 mm cabinet or closet for SIPR net; rack and patch panels
Casework	None
Security	GFGI: lock box required at each terminal; security access control/alarm; security camera with control/monitoring in AD Control Center and ANG Security Control (Option 4)
Equipment	None
Furnishings	None
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Solid man-door 900 mm x 2100 mm between this room and Control Center; sound gasketting
Window	None
FINISHES	
Floor	Raised computer access flooring; ground every 18.6 SM; structural steel and reinforced steel shall be bonded to grounding system; carpet
Base	Rubber
Walls	Painted fully grouted masonry wall (filled block or PPC) between this room and any adjacent public or semi-public areas; painted GWB
Ceiling	Open to structure
Window Treatment	N/A



ROOM CRITERIA SHEETS
UTILITY - ELEC GEN - ELEC ROOM

Electrical Generator ↔ Exterior

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
UTILITY - FAN ROOM

ROOM NAME	FAN ROOM
Function	Space for equipment
Adjacencies	Centrally located; mezzanine level if acceptable; ground level is acceptable
Area	As needed to support functions; approximately 111.5 SM
Minimum Ceiling Height	Open to structure; 2438.4 mm minimum
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Direct/indirect pendant fluorescent
Telecommunication	(2) voice ports
Data	(2) data ports
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	Isolate equipment noise and vibration from occupied spaces; STC 62 to adjacent offices; provide sound separation from adjacent spaces
Life Safety	None
Door	Double man-doors 1800 mm x 2100 mm to adjacent roof if on mezzanine or to grade if on grade; storage function lockset; sound gasketting; standard man-door 900 mm x 2100 mm to stairs if on mezzanine
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Painted GWB
Ceiling	Exposed to structure
Window Treatment	N/A
BUBBLE DIAGRAM	
	<pre> graph LR FR((Fan Room)) <--> S(Stairs) S <--> C(Corridor) </pre>

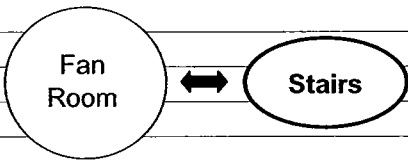
CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
UTILITY - MECHANICAL

ROOM NAME	MECHANICAL ROOM
Function	Space for mechanical equipment
Adjacencies	Exterior access; Corridor
Area	As needed to support functions; approximately 35.9 SM TOO SMALL; BILL ARNOLD TO PROVIDE SKETCH
Minimum Ceiling Height	Open to structure
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Direct/indirect pendant fluorescent
Telecommunication	(2) voice ports
Data	(2) data ports
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	Individual ventilation to maintain maximum room temperature
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	Isolate equipment noise and vibration from occupied spaces; STC 62 to adjacent spaces
Life Safety	None
Door	Double exterior man-door 1800 mm x 2100 mm; storage function lockset; standard man-door 900 mm x 2100 mm into Corridor; sound gasketing to interior
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Painted CMU
Ceiling	Exposed to structure
Window Treatment	N/A
BUBBLE DIAGRAM	
	<pre> graph LR Corridor --- Mechanical Mechanical --- Exterior </pre>

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
UTILITY - STAIRS TO FAN RM

ROOM NAME	STAIRS TO FAN ROOM
Function	Access to Fan Room
Adjacencies	Exterior access; Fan Room
Area	As needed to support functions
Minimum Ceiling Height	Open to structure; 2438.4 mm minimum
BUILDING SYSTEMS	
Electrical	None
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	None
Data	None
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm from exterior
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Painted GWB
Ceiling	Exposed to structure
Window Treatment	N/A
BUBBLE DIAGRAM	
 <pre> graph LR A((Fan Room)) <--> B([Stairs]) </pre>	

ROOM CRITERIA SHEETS

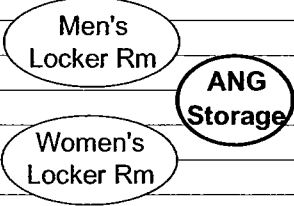
UTILITY - AD STORAGE

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graph TD
    A((AD Storage)) --- B((Women's Locker Rm))
    A --- C((Men's Locker Rm))
  
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CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
UTILITY - ANG STORAGE

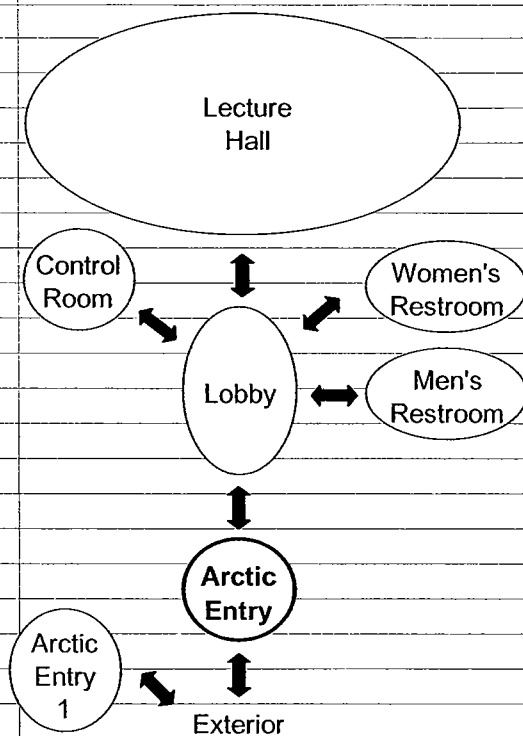
ROOM NAME	ANG STORAGE / JANITOR ROOM
Function	Space for storage of cleaning equipment and supplies
Adjacencies	Locker Rooms
Area	9.3 SM
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	None
Data	None
Plumbing	Floor mounted janitor sink; rim guard; faucet with wall brace; vacuum breaker; bucket hook
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm; sound gasketting
Window	None
FINISHES	
Floor	Vinyl composition tile or resilient sheet flooring
Base	Rubber
Walls	Painted GWB
Wainscot	FRP panels to 1219.2 mm at wet area
Ceiling	Painted GWB
Window Treatment	N/A
BUBBLE DIAGRAM	
	

CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - ARCTIC ENTRY

ROOM NAME	LECTURE HALL ARCTIC ENTRY
Function	Main entry point to Lecture Hall; reduce heat loss; shed tracked dirt, snow and water
Adjacencies	Exterior; Lobby; near Arctic Entry 1
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Misc. power as required
Lighting	Surface mounted wrap type fluorescent fixture(s) on ceiling
Telecommunication	1 voice outlet
Data	None
Plumbing	None
Heating	Provide a separate zone for this entry
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	GFGI: camera for surveillance of Arctic Entry exterior door with control/monitoring in AD Control Center and ANG Security Control (Option 4); electronic entry controls terminating at AD Control Center; override with keypad entry at each Arctic Entry point
Equipment	None
Furnishings	None
Acoustical	None
Life Safety	None
Door	(2) sets insulated glass man-doors 1800 mm x 2100 mm; transom or sidelites optional
Window	None
FINISHES	
Floor	Vinyl composition tile; walk-off mat
Base	Rubber
Walls	Painted GWB
Ceiling	Painted GWB
Window Treatment	N/A
SPECIAL NOTE	
	Betterment 1: Add 162 person Lecture Hall. Eliminate Shared Classroom.

BUBBLE DIAGRAM

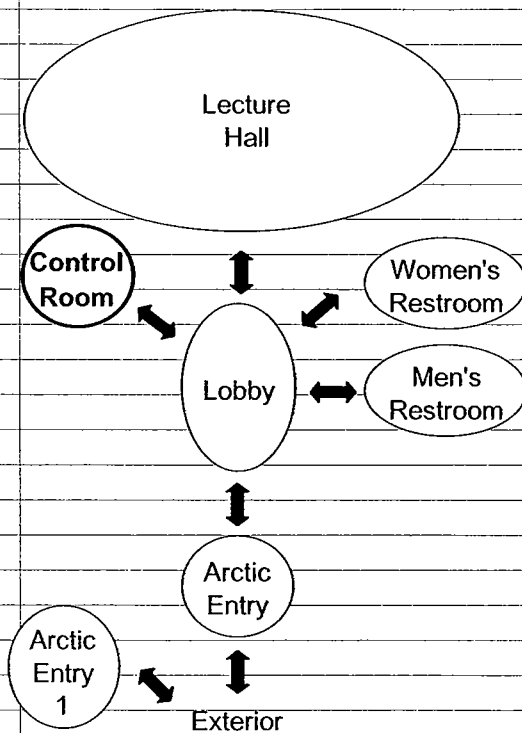


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - CONTROL ROOM

ROOM NAME	CONTROL ROOM
Function	Space utilized for operation of Lecture Hall audio/video system
Adjacencies	Lecture Hall Arctic Entry; Lecture Hall; Lobby; Men's and Women's Restrooms; near Arctic Entry 1
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall - dedicated power strips and circuits for A/V equipment as required.
Lighting	Recessed fluorescent with multi-level switching
Telecommunication/Data	(2) voice ports, raceway system(s) for special A/V systems as required; (4) non-secure LAN ports with a minimum of telecommunication/data outlet within three feet of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	None
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	None
Equipment	None
Furnishings	None
Acoustical	STC 55 to adjacent spaces
Life Safety	None
Door	Standard man-door(s) 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketting
Window	None
FINISHES	
Floor	Carpet
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended Acoustical Panel
Window Treatment	N/A
SPECIAL NOTE	Betterment 1: Add 162 person Lecture Hall. Eliminate Shared Classroom.

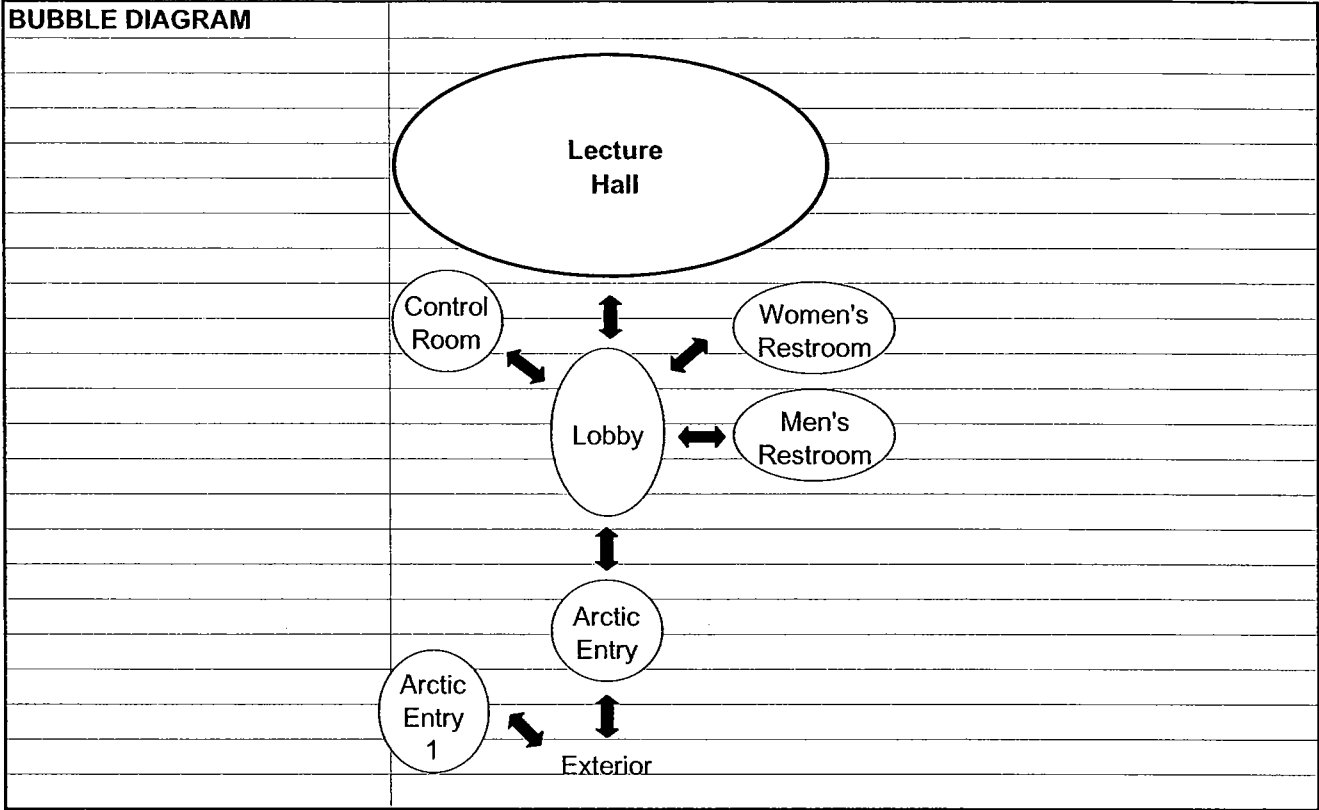
BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - LECTURE HALL

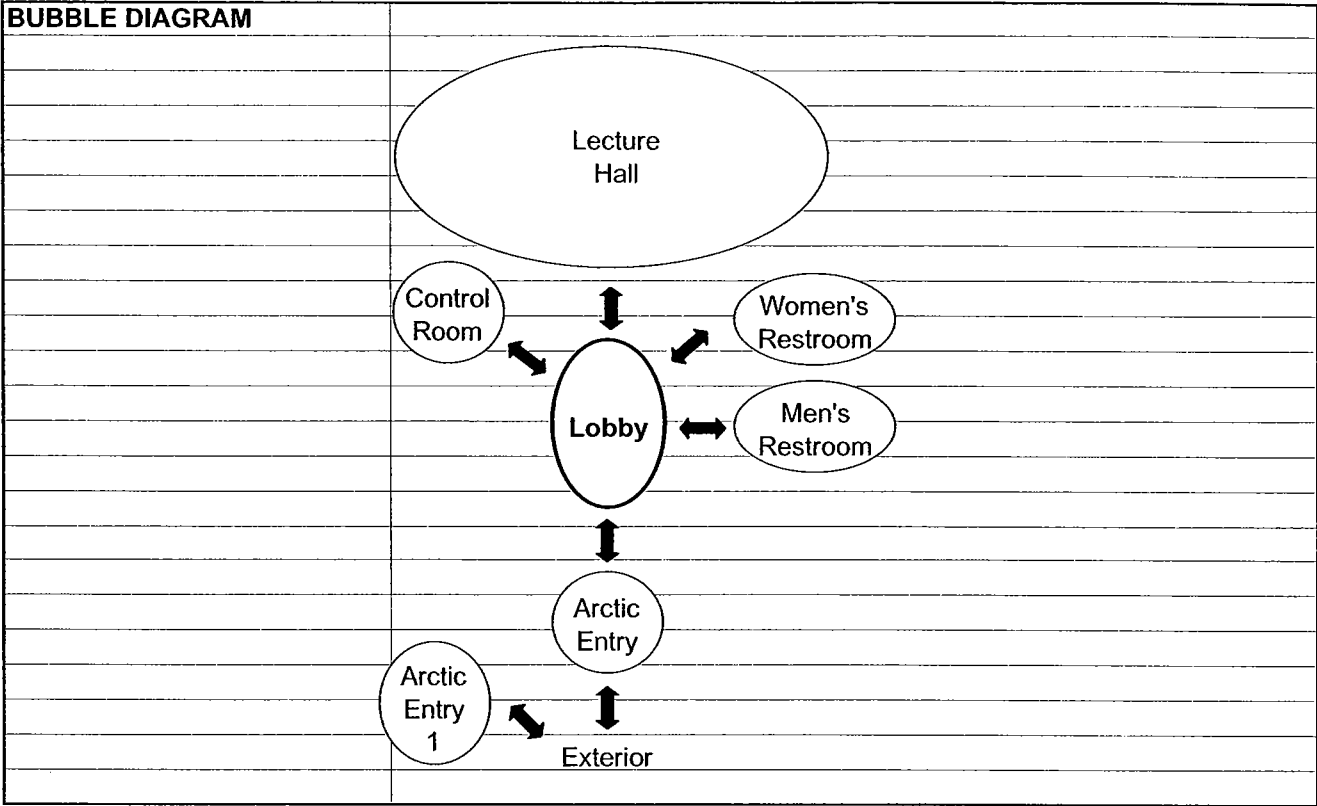
ROOM NAME	LECTURE HALL (BETTERMENT 1)
Function	Shared space for training, in-house briefing
Adjacencies	Lecture Hall Arctic Entry; Control Room; Lobby; Men's and Women's Restrooms; near Arctic Entry 1
Area	As needed to support functions; approximately 426 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers
Lighting	Recessed fluorescent (multi-level/dimmable)
Telecommunication/Data	(3) voice ports - wall, (2) voice ports - floor, CCTV raceway, local PA; (3) data ports - wall, (2) data ports - floor, (1) data port - ceiling with a minimum of a telecommunication/data outlet within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	Storage and speaker closet on each side of lectern platform
Casework	None
Security	None
Equipment	GFGI: (2) ceiling mounted video projection systems; 914.4 mm x 1524 mm dry erase board; CFCI: conduit & bracing in ceiling for projection screen and sound system; (2) 2438.4 mm wide x 2133.6 mm high concealed motorized projection screens
Furnishings	GFGI: auditorium style fixed seating with manual folding tablet arm to seat 162 people
Acoustical	STC 62 to adjacent spaces
Life Safety	ADAAG compliant
Door	Standard man-door(s) 900 mm x 2100 mm; glazed panel in door; office function lockset; sound gasketing to Lobby; standard exterior exit man-door(s) 900 mm x 2100 mm; quantity as required to meet Code
Window	Operable windows desired
FINISHES	
Floor	Raised platform lectern, approximately 2438.4 mm deep x 7620 mm wide x 914.4 mm high; floor sloped for excellent sight lines for all seats; carpet
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	Sun control and blackout capabilities
SPECIAL NOTE	
	Betterment 1: Add 162 person Lecture Hall. Eliminate Shared Classroom.



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - LOBBY

ROOM NAME	LOBBY
Function	Circulation
Adjacencies	Lecture Hall Arctic Entry; Control Room; Lecture Hall; Men's and Women's Restrooms
Area	As needed to support functions
Minimum Ceiling Height	3048 mm
BUILDING SYSTEMS	
Electrical	A duplex receptacle on each wall
Lighting	Recessed fluorescent
Telecommunication/Data	Provide a minimum of a telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	None
Casework	None
Security	Secured access control - integrate with security cameras & audio/video recording system
Equipment	None
Furnishings	None
Acoustical	STC 47 to adjacent spaces
Life Safety	ABC Fire Extinguisher
Door	None
Window	May have operable exterior windows
FINISHES	
Floor	Vinyl composition tile or resilient sheet flooring
Base	Rubber
Walls	Painted GWB; 101.6-152.4 mm plastic chair rail moulding at 914.4 mm
Ceiling	Suspended acoustical panel
Window Treatment	N/A
SPECIAL NOTE	
Betterment 1: Add 162 person Lecture Hall. Eliminate Shared Classroom.	

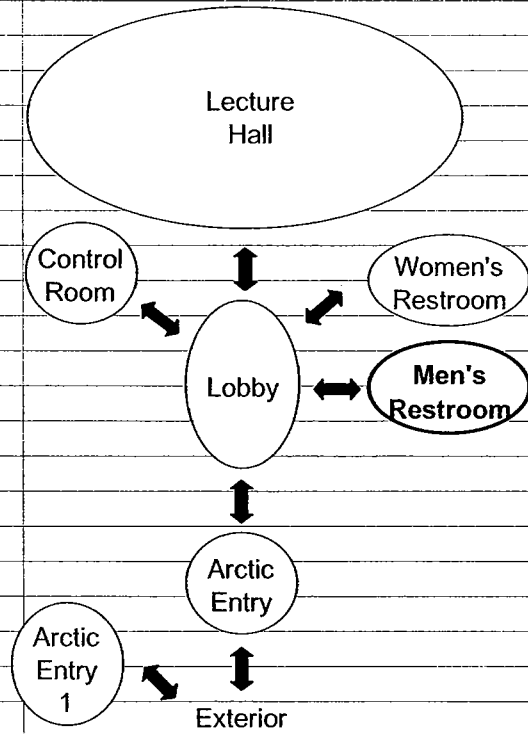


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - MEN'S RESTROOM

ROOM NAME	MEN'S RESTROOM
Function	Washroom
Adjacencies	Lecture Hall Arctic Entry; Control Room; Lecture Hall; Lobby; Women's Restroom
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture, surface mounted wrap type fluorescent fixtures on ceiling
Telecommunication	None
Data	None
Plumbing	(1) wall-mounted water closet; (1) lavatory installed in solid surface counter
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fan
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface vanity countertop
Security	None
Equipment	None
Furnishings	CFCI: toilet tissue dispenser; paper towel dispenser/receptacle; soap dispenser; vanity mirror; coat hook
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliant
Door	Standard man-door 900 mm x 2100 mm; sound gasketting
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot
Wainscot	1219.2 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

BUBBLE DIAGRAM

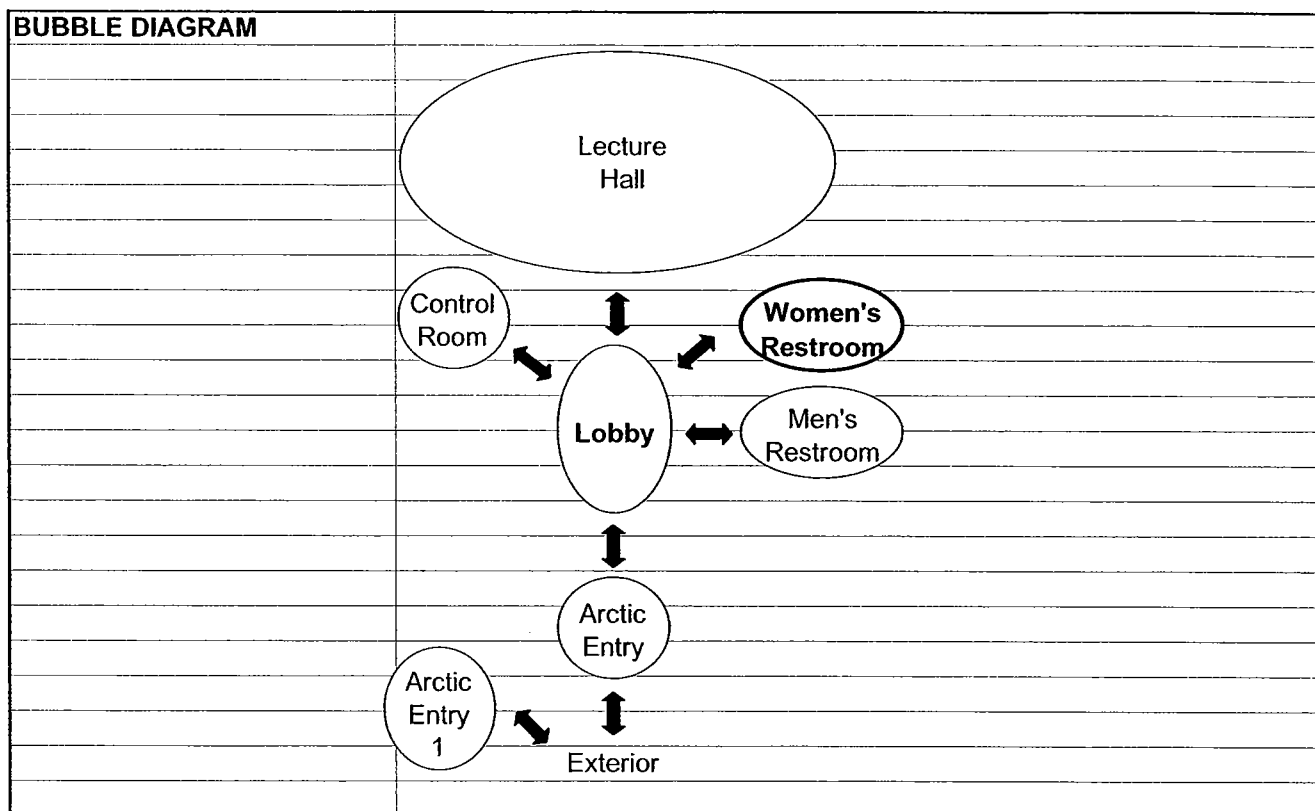


CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 1 - WOMEN'S RESTROOM

ROOM NAME	WOMEN'S RESTROOM
Function	Washroom
Adjacencies	Lecture Hall Arctic Entry; Control Room; Lecture Hall; Lobby; Women's Restroom
Area	As needed to support functions
Minimum Ceiling Height	2743.2 mm
BUILDING SYSTEMS	
Electrical	Ground fault circuit interrupt type duplex receptacle at sink
Lighting	Over-mirror fluorescent fixture, surface mounted wrap type fluorescent fixtures on ceiling
Telecommunication	None
Data	None
Plumbing	(1) wall-mounted water closet; (1) lavatory installed in solid surface counter
Heating	Provide system to satisfy design criteria
Ventilation	Exhaust fan
SPECIAL REQUIREMENTS	
Storage	None
Casework	CFCI: solid surface vanity countertop
Security	None
Equipment	None
Furnishings	CFCI: toilet tissue dispenser; paper towel dispenser/receptacle; soap dispenser; vanity mirror; coat hook
Acoustical	STC 52 to adjacent spaces
Life Safety	ADAAG and UFAS compliant
Door	Standard man-door 900 mm x 2100 mm; sound gasketting
Window	None
FINISHES	
Floor	Ceramic tile
Base	Ceramic tile
Walls	Painted GWB exposed above wainscot
Wainscot	1219.2 mm high ceramic tile
Ceiling	Painted GWB
Window Treatment	N/A

BUBBLE DIAGRAM



CONSOLIDATED SECURITY FORCES COMPLEX - EIELSON AFB

ROOM CRITERIA SHEETS
BETTERMENT 2 - ANG MOBIL SUPPLY

ROOM NAME	ANG MOBILITY SUPPLY
Function	Supply room for bench stock; daily issue of gear and equipment (handcuffs, web belts, cold weather gear, vests, office supplies)
Adjacencies	Resources Office
Area	74.3 SM
Minimum Ceiling Height	3657.6 mm
BUILDING SYSTEMS	
Electrical	Duplex receptacles on 3658 mm centers at 1219 mm AFF on each wall, additional receptacles at counter area
Lighting	Recessed fluorescent
Telecommunication/Data	(2) voice ports, (2) additional at issue counter height; (2) data ports, (3) additional at issue counter height and a minimum of a telecommunication/data outlet (one data and one telephone) within 914.4 mm of each duplex receptacle
Plumbing	None
Heating	Provide system to satisfy design criteria
Ventilation	GFGI: ceiling fan (Option 5)
SPECIAL REQUIREMENTS	
Storage	GFGI: heavy-duty shelving
Casework	None
Security	None
Equipment	GFGI: (3) computers
Furnishings	GFGI: (3) work stations; issue counter
Acoustical	STC 47 to adjacent spaces
Life Safety	None
Door	Standard man-door 900 mm x 2100 mm to Corridor; glazed panel in door; office function lockset; sound gasketing
Window	None
FINISHES	
Floor	Sealed concrete
Base	Rubber
Walls	Painted GWB
Ceiling	Suspended acoustical panel
Window Treatment	N/A
SPECIAL NOTE	Betterment 2: Add 74.3 square meter ANG Mobility Supply function. Reduce ANG Break Room by 18.6 square meters, from 65 to 46.4 square meters.
BUBBLE DIAGRAM	
<pre> graph LR LC([Learning Center]) <--> RO([Resources Office]) RO <--> MS([Mobility Supply]) MS <--> C([Corridor]) </pre>	

EIE183 – CONSOLIDATED SECURITY FORCES COMPLEX

EIELSON AFB, AK
RCS ROOM TABULATION

ROOM TABULATION					
Room Name	Occ. Type *	Area – m ²	Area – ft ²	Page	ADA
ACTIVE DUTY (AD)					
COMMAND STAFF – ANTITERRORISM OFFICER'S OFFICE	B	13.935	150	109	Y
COMMAND STAFF – COMMANDER'S OFFICE	B	20.438	220	111	Y
COMMAND STAFF – COMMANDER'S SECRETARY'S OFFICE	B	18.58	200	113	Y
COMMAND STAFF – COMMANDER'S SUPPORT STAFF	B	41.805	450	115	Y
COMMAND STAFF – COFFEE BAR	A-3	2.2296	24	117	Y
COMMAND STAFF – CONFERENCE ROOM	A-3	40.876	440	119	Y
COMMAND STAFF – FIRST SERGEANT'S OFFICE	B	13.935	150	121	Y
COMMAND STAFF – PRIVATE RESTROOM	Accessory	0.0	0	123	Y
COMMAND STAFF – SECURITY FORCES MANAGER'S OFFICE	B	13.935	150	125	Y
MOBILITY – ARMORY	S-1	78.965	850	127	Y
MOBILITY – ARMORY MUNITIONS STORAGE VAULT (6 m ² (64 ft ²) included within 79 m ² (850 ft ²) Armory)	H-1			129	
MOBILITY – MEN'S LOCKER ROOM (Showers / Lockers / Benches are not Required to be ADAAG Compliant)	A-3	0.0	0	130	N
MOBILITY – MOBILITY BAY	S-1	297.28	3200	132	Y
MOBILITY – MOBILITY SUPPLY	S-1	74.32	800	134	Y
MOBILITY – OPEN RANKS INSPECTION AREA	A-3	92.9	1000	136	Y
MOBILITY – WOMEN'S LOCKER ROOM (Showers / Lockers / Benches are not Required to be ADAAG Compliant)	A-3	0.0	0	138	N
OPERATIONS – EVIDENCE ROOM	B	7.2462	78	140	Y
OPERATIONS – INTERVIEW ROOM 3	B	9.29	100	142	Y
OPERATIONS – INVESTIGATIONS OFFICE	B	29.728	320	144	Y
OPERATIONS – NCOIC / SFCCO	B	11.148	120	146	Y
OPERATIONS – OPERATIONS OFFICER'S OFFICE	B	13.935	150	148	Y
OPERATIONS – OPERATIONS SUPERINTENDENT'S OFFICE	B	13.935	150	150	Y
OPERATIONS – PLANS & PROGRAMS	B	11.148	120	152	Y
OPERATIONS – POLICE SVCS / PHYS SECURITY / INSTALLATION SECURITY / INFO MGMT	B	27.87	300	154	Y
POLICE SERVICES – DATA MASTER'S OFFICE	B	7.432	80	156	Y
POLICE SERVICES – FLIGHT OPERATIONS OFFICE	B	11.148	120	158	Y
POLICE SERVICES – FLIGHT SERGEANT'S OFFICE	B	22.296	240	160	Y
POLICE SERVICES – INTERVIEW ROOM 1	B	7.432	80	162	Y
POLICE SERVICES – INTERVIEW ROOM 2	B	7.432	80	164	Y
POLICE SERVICES – PARKING GARAGE / WARM VEHICLE STORAGE	S-1	303.1792	3263.5	166	Y
POLICE SERVICES – PATROLMAN'S OFFICE	B	11.148	120	168	Y
SECURITY FORCES CONTROL CENTER - BATTLESTAFF	B	18.58	200	170	Y
SECURITY FORCES CONTROL CENTER – CONTROL CENTER	B	37.16	400	172	Y
SECURITY FORCES INFO – PERSONNEL, INDUSTRIAL, INFORMATION SECURITY	B	27.87	300	174	Y
SECURITY FORCES INFO – REPORTS & ANALYSIS / INFORMATION MANAGEMENT	B	27.87	300	175	Y
SECURITY FORCES INFO – REPORTS & ANALYSIS SUPERINTENDENT'S OFFICE	B	13.935	150	176	Y
TRAINING – ADMINISTRATION / COMPUTER SUPPORT	B	11.148	120	177	Y
TRAINING – BREAK ROOM	A-3	69.675	750	179	Y
TRAINING – DISTANCE LEARNING	B	26.012	280	181	Y
TRAINING – RESOURCES & TECHNICAL SUPPORT OFFICE	B	13.935	150	183	Y
TRAINING – RESOURCES TRAINING OFFICE	B	13.935	150	185	Y
TRAINING – STANDARDIZATION / EVALUATION OFFICE	B	18.58	200	187	Y
TRAINING – TEST ROOM 1	B	5.8527	63	189	Y
TRAINING – TEST ROOM 2	B	5.8527	63	191	Y
TRAINING – TRAINING OFFICE	B	41.805	450	193	Y

* Assumed Occupancy Type; Designer of Record to verify

RCS ROOM TABULATION
10/23/2003

EIE183 – CONSOLIDATED SECURITY FORCES COMPLEX

EIELSON AFB, AK
RCS ROOM TABULATION

ROOM TABULATION					
Room Name	Occ. Type *	Area – m ²	Area – ft ²	Page	ADA
AIR NATIONAL GUARD (ANG)					
COMMAND STAFF – ADMINISTRATION OFFICE	B	41.805	450	195	Y
COMMAND STAFF – BREAK ROOM	A-3	65.03	700	196	Y
COMMAND STAFF – COMMANDER'S OFFICE	B	20.438	220	198	Y
COMMAND STAFF – CONFERENCE ROOM	B	23.225	250	199	Y
COMMAND STAFF – FIRST SERGEANT'S OFFICE	B	13.935	150	200	Y
COMMAND STAFF – OPERATIONS SUPERINTENDENT'S OFFICE	B	13.935	150	201	Y
COMMAND STAFF – SECURITY CONTROL	B	13.935	150	202	Y
COMMAND STAFF – SECURITY FORCES MANAGER'S OFFICE	B	13.935	150	204	Y
GENERAL USE – MEN'S LOCKER ROOM	A-3	0.0	0	205	Y
GENERAL USE – WOMEN'S LOCKER ROOM	A-3	0.0	0	207	Y
MOBILITY – ARMORY	S-1	46.45	500	209	Y
MOBILITY – COMBAT ARMS TRAINING MAINTENANCE SHOP (CATMS)	S-1	32.515	350	211	Y
MOBILITY – COMBAT ARMS TRAINING MAINTENANCE SHOP (CATMS) OFFICE	B	27.87	300	213	Y
MOBILITY – MOBILITY BAY	S-1	371.6	4000	215	Y
RESOURCES – LEARNING CENTER	B	18.58	200	217	Y
RESOURCES – RESOURCES OFFICE	B	46.45	500	218	Y
SHARED					
CLASSROOM	A-3	185.8	2000	219	Y
COMBAT ARMS TRAINING SIMULATION (CATS) ROOM	A-3	139.35	1500	221	Y
CIRCULATION					
PUBLIC ARCTIC ENTRY 1		0.0	0	223	Y
ANG ARCTIC ENTRY 2		0.0	0	224	Y
AD ARCTIC ENTRY 3		0.0	0	226	Y
AD ARCTIC ENTRY 4		0.0	0	228	Y
CORRIDOR		0.0	0	230	Y
LOBBY	A-3	0.0	0	232	Y
UTILITY					
COMMUNICATIONS ROOM	B	27.87	300	234	Y
ELECTRICAL GENERATOR / ELECTRICAL ROOM	S-1	27.87	300	236	Y
FAN ROOM	Incidental	111.48	1200	237	Y
MECHANICAL ROOM	Incidental	35.8594	386	238	Y
STAIRS TO FAN ROOM	Accessory	0.0	0	239	Y
AD STORAGE / JANITOR ROOM	B	9.29	100	240	Y
ANG STORAGE / JANITOR ROOM	B	9.29	100	241	Y
ROOM & CIRCULATION AREA TOTAL		2832.29	30487.5		

* Assumed Occupancy Type; Designer of Record to verify

NOTE: SEE SECTION 01010, PART 3, ROOM CRITERIA SHEETS

A = ADJACENT
 N = NEAR
 F = FAR (PHYSICAL AND/OR ACOUSTICAL SEPARATION)

A ADJACENT
N NEAR
F FAR (PHYSICAL AND/OR ACOUSTICAL SEPARATION)

**SECURITY FORCES COMPLEX
EIE183 – EIELSON AFB, ALASKA
FINAL REQUEST FOR PROPOSAL**

**SECTION 01012
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SECTION 01012 DESIGN AFTER AWARD**PART 1 - GENERAL****1.1 SUMMARY**

- A. This section lists items that must be submitted for review at various times during the preparation of the construction plans and specifications. A meeting with the government is required following contract award, referred to as the "Proposal Design Documents Review Meeting". Design submittals are required at the 65% design stage, 95% design stage and at the 100% design stage. The requirements of each design stage are listed in this section.
- B. Design submittals must comply with all requirements stated in this RFP. In the event of any conflict between the RFP criteria and the Contractor's submittals, the RFP criteria will govern unless there is a written and signed agreement between the Contractor and the Contracting Officer waiving a specific requirement.
- C. The Contractor shall provide design submittals for review by the Government according to the project schedule. Quantities of submittal requirements are summarized in paragraph 1.5. All submittals shall be delivered to the Alaska District Offices, Elmendorf AFB.

1.2 GOVERNMENT REVIEW COMMENTS

- A. Design submittals and review conferences shall follow the schedule of the Contractor's initial proposal and shall incorporate required periods for Government review. Changes to that schedule must be requested in writing and approved by the Government.
- B. After receipt of the 65% submittal the Government shall have thirty (30) days for review and comment. After receipt of the 95% submittal packages, the Government shall have thirty (30) days for review and comment. A Review Conference shall be scheduled at Eielson AFB during the first week after each review and comment period. The review will be for conformance with the requirements of the solicitation and the Contractor's Proposal.
- C. Review Conferences: at each review conference, or just prior to the conference, the Government will furnish the Contractor comments from the various design sections and from other concerned agencies involved in the review process. The Contractor shall bring key design personnel for each discipline to all review conferences. During the conferences, the Contractor will either accept the comments, with or without provisions, or have comments withdrawn if generally agreed upon.
 - 1. Review comments provided to the Contractor will not necessarily show coordination requirements with other parts of the submittal. The Contractor shall incorporate and coordinate the review comments into each part of the next submittal as necessary.
 - 2. Conference Records: The Contractor shall, within seven (7) working days after each conference or discussion, either telephonic or in person, prepare a written record of the meeting and/or discussions and furnish two copies to the Project Manager. The written report shall include the project name, contract number, subject, name of the participants, outline of discussions, recommendations and conclusions. All meetings site visits, review conferences, and telephonic discussions require written records.
 - 3. Annotating Review Comments: The Contractor shall ensure all members of the design team are utilizing DrChecks. Please contact the PM or Mr. Michael (Slice) Roberts (907) 753-5759 for assistance in accessing this web based system. After each submittal, the Contractor will be furnished design review comments from the various reviewers and concerned agencies involved in the review process. Many of the comments will be posted in DrChecks Review System. Some of the comments may be provided by the PM in hardcopy or other electronic means. For all reviewer comments posted in DrChecks or provided by other formats by close of business three workdays before the review

SECTION 01012 DESIGN AFTER AWARD

conference, the Contractor shall post designer response (accept, non-concur) prior to the review conference. For all comments provided electronically or hardcopy, the A-E shall enter these into DrChecks and note in the comments section who the commenter is they are being entered for. Reviewers may post additional review comments after this time, but the Contractor is not expected to respond to those newer comments until the review conference.

- a. The Contractor shall run a copy of all comments and responses and newer comments posted in DrChecks at noon (or after) on the workday before the review conference. In addition, any additional comments in other formats received from the PM, by noon shall be copied as well. The Contractor shall prepare 25 copies of these comments for distribution at the review conference.
- b. The Contractor shall document and prepare minutes of the review conference. Within 3 workdays after the review conference the Contractor shall post in DrChecks the disposition of each comment from the review conference. The Contractor must enter any comments received in other formats into DrChecks as well. See paragraph 1.5 for distribution matrix.
- c. Some of the comments may remain outstanding or there may be action required by the Contractor. The Contractor shall provide "designer annotations" into DrChecks.
- d. Prior to the next submittal the Contractor shall ensure all designer responses are entered into DrChecks. The Contractor shall furnish a hardcopy of the disposition of all of the comments with the next scheduled submittal. The disposition will clearly indicate the specific actions taken in response to each comment. Merely stating "concur" or "will comply" is not considered an adequate indication of actions taken.
- e. If the Contractor believes the action required by any comment exceeds the requirements of the RFP, no action shall be taken and the COE must be immediately notified in writing. No work or services shall be performed for which an additional cost or fee will be charged without prior written authorization of the Contracting Officer.

1.3 DESIGNER OF RECORD

- A. The Contractor shall identify, for approval, the Designer of Record for each area of work. One Designer of Record may be responsible for more than one area provided he or she is a registered professional in that discipline in the State of Alaska. The Designer(s) of Record shall stamp and sign all 100% design drawings.
- B. Upon contract award the Contractor shall submit to the project manager a list of the Designers of Record and identify any changes to the project personnel from that presented in the proposal, and the reason for the change. The Government reserves the right to accept or reject the change before issuing the Notice To Proceed.
- C. The Designers of Record shall review and approve all construction shop drawings and submittals.

1.4 INDEPENDENT DESIGN DOCUMENT REVIEW AND CERTIFICATION

- A. The Contractor shall ensure that all design documents submitted after award, including all drawings and calculations, are reviewed by a registered senior engineer/architect in the required discipline, including fire protection engineer, who is independent from and not associated with the design. The independent reviewer may or may not be associated with the organization having done the original design.
- B. The independent reviewer must submit a signed letter of certification at each review conference for each design submittal stating also that he or she has reviewed the design documents for that

SECTION 01012 DESIGN AFTER AWARD

discipline and that he or she agrees that the design is complete, correct, and in conformance with the requirements of the RFP.

1.5 DOCUMENT SETS

DOCUMENT SETS SUMMARY					
		Post-Award Review Conference	65% Design Submittal	95% Design Submittal	100% Design Submittal
Design Analysis			35 copies	35 copies	25 copies
Drawing Sets	½ size	15	35	35	25
	Full size	2			
	CD-ROM				6
Specifications		15	35	35	25
Interior Design Package			2 Color Boards, 4 color copies	2 Color Boards, 4 color copies (updated)	2 Color Boards, 4 color copies (updated)
Demolition Work Plan				Yes	Yes
Shop Drawing Register				Yes	Yes
Hazard Abatement Work Plan			Yes	Yes	Yes
Independent Review Certification			Yes	Yes	Yes
DoD Form 1354				Yes	
Annotated Review Comments			25	25	25

A. 10 sets shall be sent to the Northern Area Office and 25 sets shall be sent to the Project Manager. All sets shall be mailed via overnight delivery.

B. Submit to:

USACE NORTHERN AREA OFFICE
Attn: CEPOS-CO-NA-EI
Norman Sams
2104 Montgomery Road
Ft. Wainwright, AK 99703

USACE
Attn: CEPOA-PM-M-AF
Dean Homleid
2204 3rd Street
Elmendorf AFB, AK 99506

PART 2 - POST-AWARD DESIGN REVIEW CONFERENCE

2.1 MEETING PURPOSE

A. Following contract award the Contractor and leaders from each design discipline shall meet with project stakeholders from the Government. At this meeting stakeholders will comment on elements of the Contractor's design submitted as part of his proposal. Comments and discussions may cover a wide variety of issues from color scheme to functional layouts. The goal of this meeting is to fine tune the design to best meet stakeholder needs with little or no

SECTION 01012 DESIGN AFTER AWARD

additional cost to the Government. Fast tracking and other scheduling concerns will be identified and discussed.

1. Contractor shall bring 15 half-size and 2 full size sets of Proposal Design drawings and 15 Specifications for use during the meeting.
2. Contractor shall complete and submit the Eielson AFB Waste Disposal/Borrow Pit Coordination Review found in Appendix 6 to 354th CES/CEVN (377-5182) no later than the Post-Award Review Conference. Using the Coordination Review the Air Force will prepare an Eielson AFB Waste Disposal/Borrow Pit Plan for the project. Using the Eielson AFB Waste Disposal/Borrow Pit Plan, the contractor must prepare and submit for approval an Environmental Protection/Borrow Pit Plan following the example outline in Appendix 6. The Environmental Protection/Borrow Pit Plan must be approved prior to commencement of on-site work.

2.2 MEETING FOLLOW-UP

- A. Following this meeting the Contractor will prepare written documents, sketches, etc. that address and confirm agreements made in the meeting and forward them to the Government.

PART 3 - 65% DESIGN SUBMITTAL REQUIREMENTS**3.1 DESIGN ANALYSIS (DA)**

- A. The 65% Design Analysis shall follow the format presented in appendix B of ER1110-345-700 available on the Corps of Engineers "TECHINFO" web site (<http://www.hnd.usace.army.mil/techinfo/>) excluding part 6 "Exceptions to Appendix B Requirements." The Contents shall include design calculations for all disciplines, including description of expected hazards abatement incidental to existing building reuse, and reflect the minimum requirements listed in this RFP and the Contractor's proposal, along with any subsequent negotiated items. The construction schedule shall reflect all tasks in the scope of work.

3.2 INDEPENDENT REVIEW CERTIFICATION

- A. Signed letter of certification from independent reviewer for each design discipline is required stating that he/she has reviewed the 65% Submittal design documents for that discipline and that he/she agrees that the design is complete, correct, and in conformance with the requirements of the RFP.

3.3 DESIGN DRAWINGS

- A. Drawings for the 65% submittal shall follow the format presented in Appendix C of ER1110-345-700 for standard and definitive design drawings and specifically shall follow the Alaska District Corps of Engineers CADD guidelines. Drawings shall follow the graphic standards and border selections to match Alaska District Corps of Engineers standards. The drawing set shall include the following as a minimum.

3.4 REQUIREMENTS BY DISCIPLINE

- A. CIVIL
 1. Design Analysis – description of site conditions, technical references (codes, manuals, directives), foundation report and recommendations, fire protection analysis of existing water distribution system. Include product selection and cut sheet information, and a list of questions needing user clarification/action. Site design/earthwork narrative with thorough discussion of site grading, earthwork, classified soil materials, compactive

SECTION 01012 DESIGN AFTER AWARD

effort, testing/inspection, circulation/site issues, amenities access/parking issues, geofabric materials, structural sections. Include all calculations or assumptions for site improvements, storm water drainage routing and other as necessary. Paving narrative shall include a discussion of paving criteria as specified in RFP; job mix design in accordance with AFM requirements including ability to meet RFP vehicle loading criteria, performance requirements and material criteria. Underground utilities shall include a thorough discussion for each utility system including steam, condensate, fire hydrants, domestic water supply, sanitary sewer, piping materials, all necessary utility fittings and appurtenances in accordance with RFP stated requirements.

2. Drawings
 - a. Location Map and Vicinity Map.
 - b. Site Plan with typical section cuts and pavement cuts (Scale 1:250).
 - c. Grading Plan w/ contour lines at 0.5-meter intervals and spot elevations to .001-meter accuracy. Show new and existing storm drain lines and inlets.
 - d. Utility Plan showing all utilities and associated products, (utilidors, cleanouts, manholes, fire hydrants, valve boxes, etc.) existing water lines, points of connection, and relocations. Show all new work in association with the site survey.
 - e. Utility and storm drain profiles/details.
 - f. Soil boring logs, including Government and Contractor borings. Soil boring locations can be shown on the site plan or a boring plan.
3. Draft specifications for Division 2 sections including but not be limited to site preparation, earthwork, aggregate materials, culverts, U.G. insulation, utilities, utilidors, fence, geofabric, and site signage.

B. LANDSCAPING

1. Design Analysis, including catalog cuts for signage, edging materials, and other appurtenances; plant list and maintenance requirements, and mix percentages for soil, mulch, seed, fertilizer, limestone.
2. Landscape plan showing areas to be planted and site features.
3. Draft specifications to include topsoil, seeding.

C. ARCHITECTURAL

1. Design Analysis – project scope, complete code analysis including life safety, description of systems and their insulating values (foundation, floor, wall, roof), statement of functional arrangement of spaces.
2. Drawings:
 - a. Cover sheet with Drawing Index, Abbreviations, Legend, and Graphic Symbols
 - b. Code Plan with Code Analysis, area analysis for occupant load and egress requirements, occupancy types and proposed fire-rated wall assemblies
 - c. Floor Plans, 1:100 scale
 - d. Enlarged Toilet Rooms, 1:50 scale
 - e. Enlarged Stair Plans, 1:50 scale
 - f. Roof Plan, 1:100 scale
 - g. Exterior Elevations, 1:100 scale, showing all exterior surfaces
 - h. Building Cross Sections, 1:100 scale
 - i. Exterior Wall Sections, 1:10 scale, min.
 - j. Major Exterior Details, 1:5
 - k. Reflected Ceiling Plan, 1:100 scale
 - l. Interior Wall Sections (each type and referenced fire-rated assemblies), 1:10 and 1:5 scale
 - m. Major Interior Details, 1:5
 - n. Interior Elevations
 - o. Door Schedule, Window Schedule, door and window types illustrated, Hardware Schedule
 - p. Finish and Color Schedule

SECTION 01012 DESIGN AFTER AWARD

- q. Furniture and equipment plan showing all pieces with basic modular systems furniture layout based on Unicor standards to determine if room areas are appropriate, 1:100 scale
 3. Draft Specifications of all product sections to be included in the project.
- D. STRUCTURAL
1. Design Analysis - technical references (codes, manuals, directives), design criteria (dead and live loads), list of criteria questions needing user clarification/action, calculations for gravity and lateral framing system (primary and secondary members), and their connections.
 2. Drawings
 - a. Foundation Plan
 - b. Floor and Roof Framing Plans
 - c. Shear Framing Elevations
 - d. Layouts of expansion, construction or control joints showing dimensions
 - e. Roof framing plan
 - f. Wall section through foundations, floors and roof framing with dimensions
 - g. Sections and details on footings and member sizes of anchor bolts, bearing plates and reinforcing, etc.
 - h. Sections and details on connections, bracing, diaphragm, etc.
 - i. Details on crack control joints, construction joints, additional reinforcement on large opening, header beams, or any special items
 - j. Column connection details
 - k. Framing member, column, beam and truss schedules as applicable
 - l. Foundation schedule
 - m. General notes, code analysis, soils data, design live loads and material specifics
 3. Draft Specifications of relevant Division 3, 4, 5, 6, 13 sections for all structural materials.
- E. MECHANICAL
1. Design Analyses:
 - a. Plumbing Design Analysis: shall include system narratives with thorough discussion of domestic water, rainwater, waste and vent piping systems. Discussion shall include piping materials and equipment selection and cut sheets. The design analysis shall include the following calculations:
 - 1) Piping sizes based on UPC fixture count and Hunter Curves.
 - b. Heating Design Analysis - shall include system narratives with thorough discussion of hydronic heating piping systems. Discussion shall include piping materials, pump curves, and equipment selection and cut sheets. Include the following calculations:
 - 1) Heating/cooling load calculations
 - 2) Energy Budget calculations
 - 3) Hydronic piping size calculations
 - 4) Hydronic terminal unit calculations and selections
 - 5) Hydronic head loss calculations and pump selections
 - 6) Sizing calculations and equipment selections of:
 - a) Shell and tube heat exchanger, glycol to glycol
 - b) Pressure reducing valves w/valve Cv's
 - c) Boilers
 - d) Boiler flues
 - c. Ventilation Design Analysis - shall include system narratives with thorough discussion of the building mechanical room ventilation, and miscellaneous building exhaust systems. Include equipment selection and cut sheets. Required calculations:
 - 1) Static pressure calculations for mechanical room fan and miscellaneous exhaust systems

SECTION 01012 DESIGN AFTER AWARD

- 2) Sizing calculations and equipment selections of toilet exhaust fans and all mechanical room air distribution louvers, diffusers, registers and grilles
 2. Mechanical Drawings:
 - a. Water heater sizing calculations and selection
 - b. Mechanical Legend/Notes
 - c. Mechanical Equipment Schedules
 - d. Plumbing Layout Plans, 1:100
 - e. Heating Layout Plans, 1:100
 - f. Mechanical Room Layout Plans, 1:25
 - g. Plumbing Isometrics/Details
 - h. Heating System Diagram/Details
 - i. Seismic Bracing Details
 - j. Utility Layout Plans
 3. Draft Specifications of all systems and materials used in the design.
 4. Seismic restraint of mechanical systems including calculations and bracing details of piping, ducts, and equipment shall be submitted as part of the design submittals.
- F. ELECTRICAL
1. Design Analysis:
 - a. Systems narrative, load calculations where applicable, and equipment/product catalog cuts to support the design solution illustrated in the drawings.
 2. Exterior Drawings:
 - a. Site Plan(s): including high and low voltage feeders, transformers, telecommunications service entrance, cable television service entrance.
 - b. Grounding Plan: ground conductors, electrodes, receptacles, bonding locations and means for bonding.
 - c. Exterior Lighting Plan
 - d. Electrical One-Line diagrams/Details
 3. Interior Drawings:
 - a. Power Plan 1:100
 - b. Lighting Plan 1:100
 - c. Special Systems including: communications and cable television
 - d. Panel board and Lighting Fixture Schedules: Panel board schedules shall include the designation, location, mounting (flush or surface), number of phases and wires, voltage, amp capacity and total connected load. Indicate the trip rating, frame size, interrupting rating and number of poles for each circuit breaker in the panel boards. List the circuit number, circuit description and load for each branch circuit.
 - e. One-line diagram for power distribution
 - f. Grounding Plan: ground conductors, electrodes, receptacles, bonding locations and means for bonding.
 - g. Locate all light fixtures, controls, power, smoke detectors, and emergency systems.
 - h. Electrical Details
 4. Draft Specifications for all electrical systems and materials used in the design.
- G. HAZARDS ABATEMENT
1. Design Analysis shall address the limited hazards abatement incidental to building reuse.
 2. Drawings showing the removal and disposal of hazardous materials incidental to building module reuse.
 - a. Floor plans and other drawings with types, locations, and quantities of all hazardous materials to be removed and disposed of. Show sufficient detail to allow the abatement contractor to perform work without contamination of the site or exposure to personnel.
 - b. Specifications (supplemental to paragraph 3.5 below) – prepare draft of proposed specification sections using edited Corps of Engineers Guide Specifications (CEGS) section 13280 Asbestos Abatement and 13281 Lead Hazard Control

SECTION 01012 DESIGN AFTER AWARD

Activities, and other sections for hazardous materials not addressed under these two sections.

H. FIRE PROTECTION

1. Design Analysis: including hydraulic calculations, fire pump sizing criteria, duct smoke detector criteria.
2. Drawings:
 - a. Piping and sprinkler head locations
 - b. Fire pump system layout
 - c. Duct smoke detector locations
 - d. Fire alarm riser
 - e. Fire alarm plan showing all fire alarm devices
3. Draft Specifications for all products and systems used in the design.

3.5 SPECIFICATIONS

- A. Submit Draft specifications Division 2 through Division 16 from UFGS (Uniform Federal Guide Specs). Contractor shall follow guidance provided in ER 1110-345-700 Appendix D. The 65% Specifications shall consist of Parts 1, 2 and 3 of each section and shall be inclusive of all building and site work elements.

3.6 INTERIOR DESIGN PACKAGE

- A. Scope - The Contractor shall provide Building Related Interior Design as outlined in ER 1110-345-122 available from the Corps of Engineers "TECHINFO" web site (<http://www.hnd.usace.army.mil/techinfo/>). The design and design review shall be accomplished by, or in consultation with, professional interior designers and architects. The 65% submittal shall include product samples, color boards, plus any other media, which accurately describe the interior finishes and furnishings throughout.
- B. COLOR BOARDS - The Contractor shall prepare color boards of materials proposed. Boards shall be of professional quality, in 8 1/2" x 11" or 11"x17" format on illustration board backing. Boards shall consist of actual samples and color chips. Materials that will be adjacent in their installed locations shall be adjacent on the board. Boards shall indicate proportion of areas where finishes will be applied (e.g. accent finish small relative to field finish). A key shall be provided on the back of each board relating colors and materials to manufacturers' identification, contract finishes schedule, and installed location.

PART 4 - 95% DESIGN SUBMITTAL REQUIREMENTS**4.1 REVIEW COMMENTS**

- A. Incorporate all Government review comments from the 65% submittal review into the drawings and specifications. Prepare annotated (accepted/rejected, and action taken) Government review comments.

4.2 INDEPENDENT REVIEW CERTIFICATION

- A. Signed letter of certification from independent reviewer for each design discipline stating that he/she has reviewed the 95% Submittal design documents for that discipline and that he/she agrees that the design is complete, correct, and in conformance with the requirements of the RFP.

SECTION 01012 DESIGN AFTER AWARD4.3 [DoD FORM 1354](#)

- A. The contractor shall provide a completed DoD Form 1354, Transfer and Acceptance of Military Real Property dated February 1990 and attached at the end of this section. DoD Form 1354 itemizes component costs for the construction of this project and shall be completed in accordance with Army Regulation AR-415-28.

4.4 DESIGN ANALYSIS

- A. The 95% Design Analysis shall follow the format presented in appendix B of ER1110-345-700 available on the Corps of Engineers "TECHINFO" web site (<http://www.hnd.usace.army.mil/techinfo/>) excluding part 6 "Exceptions to Appendix B Requirements". The contents shall include updated design calculations for all disciplines and other information as required and shall reflect the minimum requirements listed in this RFP and the Contractor's proposal along with any subsequent negotiated items.

4.5 DESIGN DOCUMENTS

- A. Provide complete and coordinated construction documents showing all elements necessary for construction. Drawings for all submittals shall follow the format presented in Appendix C of ER1110-345-700 for standard and definitive design drawings and, specifically, shall follow the Alaska District Corps of Engineers CADD guidelines available upon request.

1. Drawings shall be drawn in hard metric using AutoCad 2000 version, shall be complete and organized as outlined therein; such that any qualified contractor would be able to construct the facility without any additional assistance except for shop drawings or unforeseen conditions encountered during construction.
2. The contents shall reflect the minimum requirements listed in this RFP and the Contractor's proposal along with any subsequent items negotiated since award. Only minor comments are expected to be generated by the government from the 95% review.
3. A substantial number of comments generated by the Government or comments indicating that constructability and/or compliance with the RFP is not apparent in this submittal shall constitute grounds for the requirement of another, more complete, 95% design submittal. The Government shall decide after review of the 95% design submittal if another 95% submittal will be required.

- B. Minimum Requirements by Discipline:

1. CIVIL
 - a. Final civil calculations showing design basis; code references; description of analysis methods; description of computer analysis programs used; hydraulic design of fire water and sanitary sewer service; design of steam and condensate system; design of pipe anchors, guides, and hangers; design of storm water system; flexible pavement design; utilidor structural design; miscellaneous site feature design.
 - b. Field Screen Testing
 - 1) Sampling and Analysis Plan (SAP)
 - 2) Field Sampling Plan (FAP)
 - 3) Quality Assurance Program Plan (QAPP)
 - c. Demolition
 - 1) Demolition Work/Disposal Plan
 - 2) Dust Control Plan
 - 3) Demolition Work Plan, including schedule
 - 4) Temporary Erosion and Pollution Control Plan
 - d. Site Design/Earthwork
 - 1) Drawings shall include finalizing all site plans and/or grading plans necessary to meet the stated requirements outlined in the RFP and as listed in the 65% submittal requirements. All minimum dimensions shall be clearly

SECTION 01012 DESIGN AFTER AWARD

delineated on the drawings. Provide sufficient detail to determine that site layout and site amenities meet the minimum RFP requirements. Show proposed finish floor elevations, a minimum of two (2) section cuts for the building, site grading/drainage improvements and all proposed appurtenances.

- e. Asphalt Paving/Concrete Paving
 - 1) Drawings shall designate all AC paved improvements on the site plan as well as concrete improvements such as walks, miscellaneous slabs and curbs & gutters.
 - 2) Details for cutting and patching existing paved surfaces.
- f. Utilities
 - 1) Plans and profiles of utility piping and utilidors.
 - 2) Details of utility connections, supports, appurtenances.
 - 3) Utilidor sections, reinforcing details, trenching details.
- g. Miscellaneous Features
 - 1) Details of fencing, barriers, retaining walls, dumpster enclosures, and other site features.
- 2. LANDSCAPE
 - a. Drawings
 - 1) Landscape Site Plans (match Civil drawing scale)
 - 2) Planting Plan (if not included in Landscape Site Plan)
 - 3) Details/Sections
 - a) Swales and Berms
- 3. ARCHITECTURAL
 - a. Code Plan with Code Analysis, area analysis for occupant load and egress requirements, occupancy types and all fire-rated wall assemblies
 - b. Drawings
 - 1) Cover sheet with Drawing Index, Abbreviations, Legend, and Graphic Symbols
 - 2) Code Plan with Code Analysis, area analysis for occupant load and egress requirements, show means of egress, occupancy types and all fire-rated wall assemblies on Code Plan
 - 3) Floor Plans, 1:100 scale
 - 4) Mezzanine Plan (if applicable), 1:50 scale
 - 5) Enlarged Toilet Rooms, 1:50 scale
 - 6) Enlarged Stair Plans, 1:50 scale
 - 7) Roof Plan, 1:100 scale
 - 8) Exterior Elevations, 1:100 scale, showing all exterior surfaces
 - 9) Building Cross Sections, 1:100 scale
 - 10) Exterior Wall Sections, 1:10 scale, min.
 - 11) All Major Exterior Details, 1:5
 - 12) Reflected Ceiling Plan, 1:100 scale
 - 13) Interior Wall Sections/Wall Types (each type and referenced fire-rated assemblies), 1:10 and 1:5 scale
 - 14) All Major Interior Details, 1:5
 - 15) Interior Elevations (showing materials, mounting location and coordination of equipment by all disciplines)
 - 16) Door Schedule, Window Schedule, door and window types illustrated, Hardware Schedule
 - 17) Finish and Color Schedule
 - c. Final Specifications of all product sections to be included in the project manual.
- 4. STRUCTURAL
 - a. Final structural calculations showing design basis; code references; description of analysis methods; load combinations; description of computer analysis programs used; description of gravity and lateral systems; design of gravity and lateral system members; design of connections; calculations of wall and roof cladding;

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design of restraint of non-structural components. Output from computer programs will be printed as needed to identify governing loads or stresses in structural members.

- b. Drawings - shall be complete such that all materials, material layouts, connections, elevations and dimensions are clearly noted.
 - 1) Abbreviations, Structural Notes (Directly Related to this Project): Code, Soils Information, Design Live Loads, Material Specifics, Miscellaneous Information
 - 2) Plans (Scale – 1:100): Grid and Overall Dimensions, Specific Dimensions, Elevations, Section and Detail Cuts.
 - 3) Foundation Plan: Footing - Type, Size, Reinforcing, Depth, Location; Slab on Grade - Thickness, Slopes, Drains, Reinforcing, Extent, Subgrade, Pits; Pilaster - Size, Reinforcing, Location; Column - Type, Size, Location
 - 4) Floor and Roof Framing Plans: Type, Size, Extent, Spacing of framing members
 - 5) Foundation Sections/Details (Scale = 1:10)
 - 6) Framing Details (Scale = 1:10)
 - 7) Connection Details: Details of structural connections showing dimensions, sizes of connectors, spacing.

5. MECHANICAL

- a. Final mechanical calculations showing design basis; code references; description of computer analysis programs used; design of heating, ventilation, and cooling systems.
- b. Plumbing Drawings: shall include all domestic water, rain water, waste and vent piping located in the building. All plumbing fixtures and equipment shall be clearly labeled and identified on the drawings. Provide a fixture connection schedule showing all plumbing fixtures and the required plumbing systems piping connection size. Provide details as required to fully depict plumbing systems and all building shell penetrations.
- c. Heating Drawings: shall include all hydronic heating piping systems located in the building. All hydronic terminal units and equipment shall be clearly labeled and identified on the drawings. Equipment shall be located to insure proper maintenance access and removal with the required clear service area for major mechanical equipment. Provide details as required to fully depict all hydronic systems and all building shell penetrations.
- d. Waste heat recovery system heat exchanger, pumps, piping, and controls and interconnect between generators and hydronic heating system.
- e. Ventilation System Drawings: Develop drawings listed in 65% submittal to 95% completion and add details as required to fully describe the intended design. The drawings shall include all mechanical room ventilation and exhaust systems located in the building. All ventilation equipment shall be clearly labeled and identified on the drawings. Equipment shall be located to insure proper maintenance access and removal with the required clear service area for major mechanical equipment. All ductwork shall be shown as double line "true" size on the plans, building sections, and mechanical room. Provide details as required to fully depict all ventilation systems and all building shell penetrations.

6. ELECTRICAL

- a. Drawings
 - 1) Site Plans - Match Civil
 - 2) Building Plans (Scale 1:100 minimum) including:
 - a) Lighting layouts and switching
 - b) Power receptacles and mechanical and other general power utilization equipment connections
 - c) Circuiting showing numbers and sizes of wires and conduit, circuit designation. Typical minimum size and quantity of wires in conduit may be used

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- d) Telephone, computer system outlets
- e) Television outlets
- f) Distribution and lighting/appliance panels, contactors, and terminal boards/cabinets
- 3) Diagrams: One-line diagrams shall denote conductor quantities and sizes
 - a) Power one-line diagram including all panelboards, major equipment and metering, and grounding
 - b) Telephone/data one-line diagram
 - c) Television one-line diagram
- 4) Schedules
 - a) Lighting fixture schedule with lamp types, quantity, voltage, mounting and physical sizes, manufacturer and catalog number
 - b) Panelboard schedules with all circuits identified, connected loads, demand loads and short circuit ratings
- 5) Details
 - a) Exterior lighting pole bases
 - b) Primary power line
 - c) Transformer
 - d) Manholes (if required)
- b. Minimum Calculations:
 - 1) Service size in accordance with NEC requirements
 - 2) Zonal Cavity Lumen Method Lighting Levels for interior spaces designated in the requirements
 - 3) Point by point lighting calculations for all exterior areas designated in the requirements
 - 4) Short circuit currents at distribution panels to lighting and appliance panelboards
- 7. FIRE PROTECTION
 - a. Final calculations showing design basis; code references; description of computer analysis programs used; hydraulic design of piping.
 - b. Drawings: shall include all piping layout and size. Provide details as required to detail pipe support and restraint.
- 8. HAZARDOUS MATERIALS
 - a. Update previously submitted drawings showing the removal and disposal of hazardous materials.
 - b. Provide floor plans and other drawings with types, locations, and quantities of all hazardous materials to be removed and disposed of. Show sufficient detail to allow the abatement contractor to perform work without contamination of the site or exposure to personnel.

4.6 INTERIOR DESIGN PACKAGE

- A. Update the 65% Interior Design Package with any additions or changes made since the 65% Submittal. Update color boards similarly, 2 copies of each are required. If no changes occurred since the 65% Submittal, color photocopy format is acceptable.

4.7 SPECIFICATIONS

- A. Submit completed specifications Division 2 through Division 16 from UFGS (Uniform Federal Guide Specs). Contractor shall follow guidance provided in ER 1110-345-700 Appendix D. The 95% Specifications shall consist of Parts 1, 2 and 3 of each section and shall be inclusive of all building and site work elements.
- B. Catalog cuts organized by discipline and specification division shall be bound under separate cover as Volume 2 of the Specifications. Include M/E/P, Fire Protection items, and architectural elements such as: roofing assemblies, exterior materials, doors/hardware, windows, specialty

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items and equipment. Include Hazardous Materials Abatement Work Plan and all submittals required by the hazardous abatement specifications for review and approval.

4.8 DEMOLITION WORK PLAN

- A. Develop and submit a Decommissioning and Demolition plan and schedule with the Government's input on timeline activities.

4.9 SHOP DRAWING TRANSMITTAL REGISTER

- A. Develop and submit a master list of all submittal items for review by the Government, organized by discipline and specification section. Include: product submittals for approval, shop drawings for approval, shop drawings for information only (FIO), and operations and maintenance (O&M) manuals.

PART 5 - 100% DESIGN SUBMITTAL REQUIREMENTS**5.1 REVIEW COMMENTS**

- A. Incorporate all Government review comments from the 95% submittal review into the design analysis, drawings, and specifications.
- B. Prepare annotated (accepted/rejected, and action taken) 95% Submittal review comments. Provide annotated comments no later than 21 (twenty-one) days following 95% review conference.

5.2 APPROVALS

- A. Contractor requires ACO or COE approval of all aspects of the design prior to beginning of construction. Fast track portions of the design shall be identified early and approved prior to beginning of that part of the work. The contractor should anticipate a review period, not to exceed fourteen (14) working days, of the 100% Design Submittal before Government approval for construction to proceed. The final construction schedule shall be submitted for approval after ACO or COE notify the Contractor that the 100% Design Submittal is cleared for construction.
- B. All review comments from the 95% Submittal Review shall be incorporated in the 100% Design Submittal. If, in the Government's opinion, comments are not adequately incorporated the Government will not approve the 100% Design Submittal until such drawing and specification revisions are completed.

5.3 HAZARDOUS MATERIALS ABATEMENT WORK PLAN

- A. Submit a complete hazardous materials abatement work plan and all submittals required by the hazardous materials specifications for review and approval prior to beginning Demolition.

END OF SECTION

TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY										Form Approved OMB No. 0704-0188									
										PAGE	OF	PAGES							
Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.																			
1. FROM (Installation/Activity/Service and Zip code)			2. OPERATING UNIT		3. DISTRICT CODE		4. OPERATING AGENCY		5. DATE		6. JOB NUMBER		7. SERIAL NUMBER		8. CONTRACT NUMBER				
9. TO (Installation/Activity/Service and Zip code)			10. OPERATING UNIT		11. DISTRICT CODE		12. OPERATING AGENCY		13. ACCOUNTING NUMBER		14. ACCOUNTING OFFICE NUMBER		15. TYPE OF TRANSACTION A. <input type="checkbox"/> NEW CONSTR. <input type="checkbox"/> EXISTING FAC. <input type="checkbox"/> CAPITAL IMP. <input type="checkbox"/> OTHER (Specify) B. <input type="checkbox"/> BEN/F.O. <input type="checkbox"/> PHYSICAL COM. <input type="checkbox"/> FINAN. COM. <input type="checkbox"/> OTHER (Specify)				16. PROJECT NUMBER		
ITEM NO.	CATEGORY CODE	FACILITY (Category description)		NO. OF UNITS	TYPE	UNIT OF MEAS.	TOTAL QUANTITY		COST		DRAWING NUMBERS		REMARKS						
17	18	19		20	21	22	23		24		25		26						
27. STATEMENT OF COMPLETION: The facilities listed hereon are in accordance with maps, drawings, and specifications and change orders approved by the authorized representative of the using agency except for the deficiencies listed on the reverse side.														28. ACCEPTED BY (Signature)		DATE			
TRANSFERRED BY (Signature)				DATE															
TITLE (Area Engr./Base Engr./DPWQ)				TITLE (Post Engr./Base Civ. Engr./Navy Rep.)										29. PROPERTY VOUCHER NUMBER					
DD Form 1354, FEB 90 (EG)														Previous editions are obsolete.				Designed using Perform Pro, WHS/DIOR, Aug 94	

30.	CONSTRUCTION DEFICIENCIES	
31. REMARKS		
INSTRUCTIONS		
<p>This form has been designed and issued for use in connection with the transfer of military real property between the military departments and to or from other government agencies. It supersedes ENG Forms 290 and 290B (formerly used by the Army and Air Force) and NAVDOCKS Form 2317 (formerly used by the Navy).</p> <p>Existing instructions issued by the military departments relative to the preparation of the three superseded forms are applicable to this form to the extent</p>		<p>that the various items and columns on the superseded forms have been retained. Additional instructions, as appropriate, will be promulgated by the military departments in connection with any new items appearing hereon.</p> <p>With the issuance of this DD form, it is not intended that the departments shall revise and reprint manuals and directives simply to show the number of this DD form. Such action can be accomplished through the normal course of revision for other reasons.</p>

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SECTION 01015

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-- End of Section Table of Contents --

SECTION 01015

SPECIAL ITEMS

PART 1 GENERAL

1.1 SCOPE

Items included in this section cover special features and/or requirements which are not otherwise specified or indicated.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. AIR FORCE (USAF)

AFOSHSTD91-5 (1997) Welding, Cutting, and Brazing

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 1527 (1993) Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1926 Safety and Health Regulations for Construction

40 CFR 61 National Emission Standards for Hazardous Air Pollutants

U.S. ARMY CORPS OF ENGINEERS (USACE)

TI 809-04 (1998) Seismic Design for Buildings

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 241 (1996) Safeguarding Construction, Alteration, and Demolition Operations

STATE OF ALASKA ADMINISTRATIVE CODE (AAC)

18 AAC 72 (1999) Wastewater Treatment and Disposal

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SECTION 01330 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Videotapes.

1.4 ACCIDENT PREVENTION PLAN

The Contractor shall obtain the Contracting Officer's approval of the Accident Prevention Plan required by the Safety and Health Requirements Manual referenced in paragraph Accident Prevention of the Contract Clauses prior to start of any work at the project site.

1.5 FIRE SAFETY

The Contractor shall obtain a permit from the organization having jurisdiction over the job site for any welding or open flame work.

1.5.1 Fire Protection

The Contractor shall comply with local Air Force fire protection requirements and NFPA 241.

1.5.2 Welding Permit

The Contractor shall obtain AF Form 592 "USAF Welding, Cutting, and Brazing Permit" (copy attached to this section) from the Installation Fire Chief prior to any welding operations. Welding shall conform to AFOSHSTD91-5 and requires inspection and approval by the Installation Fire Department.

1.6 WORK CLEARANCE AND UTILITY OUTAGES

1.6.1 Clearance Request

The Contractor shall have a properly executed AF Form 103, Base Civil Engineering Work Clearance Request (copy attached to this section), coordinated through the Contracting Officer and signed by the Base Civil Engineer prior to any work at the project site.

1.6.2 Utility Outages

Utility outages shall be coordinated with the Base Civil Engineer through the Contracting Officer at least 7 days prior to the planned utility interruption. Outage periods shall exclude Saturdays, Sundays and holidays.

1.7 WARRANTY OF CONSTRUCTION

a. In addition to any other warranties in this contract, the

Contractor warrants, except as provided in subparagraph "i" herein, that the work performed under this contract conforms to the contract requirements and is free of any defect of equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or -controlled real or personal property, when that damage is the result of:

1. The Contractor's failure to conform to contract requirements; or
2. Any defect of equipment, material, workmanship, or design furnished.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

e. The Contracting Officer will notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, expressed or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:

1. Obtain all warranties that would be given in normal commercial practice;
2. Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and
3. Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

h. In the event the Contractor's warranty under subparagraph "b" herein has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

i. Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage which results from any defect in Government-furnished material or design.

j. This warranty shall not limit the Government's rights under the Inspection of Construction clause of this contract with respect to latent defects, gross mistakes, or fraud.

k. Defects in design or manufacture of equipment, specified by the Government on a "brand name and model" basis, shall not be included in this warranty. In this event, the Contractor shall require any subcontractors, manufacturers, or suppliers thereof to execute their warranties, in writing, directly to the Government.

1.7.1 Failures

Upon receipt of notice from the Government of failure of any part of warranted items during the warranty period, the affected part or parts shall be promptly replaced. Such replacement shall include furnishing and installing the necessary new part or parts, making all necessary repairs, restoring the affected item to the operating condition specified in this contract and making all such tests as are necessary to ensure that there are no remaining defects. Such tests shall be performed in the presence of representatives of the Using Agency indicated below. Upon final acceptance of the work or transfer of responsibility to the Government for operation and maintenance of the items covered, whichever is earlier, the Contractor shall be responsible to the Using Agency for the warranty provisions of this contract. A letter stating the applicable warranty provisions shall be furnished to the Contracting Officer in duplicate, in the format and text shown in the sample letter attached to this section. Forward warranty information to the following address: MILCOM PROGRAM MANAGER, 354th CES/CEC, 2258 Central Ave., Suite 100, Eielson AFB, AK 99702-1899. (907) 377-5159.

1.7.2 Warranty Tag

The Contractor shall provide the following information typed or printed in ink on tag stock or card stock which shall be affixed in easy view location on the warranted installed equipment:

"This equipment was installed by contract DACA85-0_-C-00__ and is under warranty by the (Construction Company Name) at (Phone Number) until (Day Month Year).

All maintenance by installation personnel is to be performed in accordance with maintenance manual provided at time of acceptance to avoid possible negation of the warranty.

In case of requirements for major adjustments, repairs or replacements, call the Base Civil Engineer's Contract Manager at (907) (337-1737)."

1.8 CAMP FACILITIES

There are no Government owned camp facilities at the jobsite for the Contractor's use.

1.9 CONTRACTOR-FURNISHED VEHICLE

The Contractor shall provide and maintain a four-wheel-drive late model Blazer/Explorer-type vehicle at the job site, in good repair and approved by the Contracting Officer, for the use of the Government representatives regularly employed at the job site. The cost of providing the vehicle and fuel, oil, maintenance and repairs shall be borne by the Contractor and included in the contract price. The vehicle shall be in place by start of initial setup work at the job site and maintained through final cleanup. During any down time, an equal substitute vehicle shall be provided immediately.

1.10 FURNISHINGS FOR GOVERNMENT FIELD OFFICE

The Government field office specified in SECTION 01500 TEMPORARY CONSTRUCTION FACILITIES shall be furnished with one desk, one drawing layout table, three chairs, a four-drawer vertical or two-drawer lateral file cabinet, a plain paper FAX machine, a business telephone with answering machine, a portable copier with automatic document feed, and an IBM compatible personal computer with SVGA monitor, 32 MB RAM, 2+ GB hard drive, MS Windows, Microsoft Office Professional latest version, Microsoft Exchange Client latest version, 56K Fax/Modem, and HP Deskjet 340 printer. The telephone and FAX machine shall have single party lines, different from each other, and separate from the Contractor's phone line(s). All costs shall be borne by the Contractor and included in the contract price, except that long distance charges incurred by the Government representative will be paid for by the Government upon arrangement with the Contracting Officer.

1.11 ACCOMMODATIONS FOR GOVERNMENT REPRESENTATIVES

The Contractor shall furnish suitable separate living facilities near the job site to be used as quarters for the Government representatives regularly employed at the job site, and located separately from the Contractor's area. All costs shall be borne by the Contractor and included in the contract price. The facilities shall be subject to the approval of the Contracting Officer and shall meet or exceed the following requirements:

- a. One house or modular-type housing unit, with the following:
- b. Single rooms for two people, each equipped with dresser, nightstand, full-size bed with clean linen, blankets and pillows; each room to have at least 15 square meters of area.
- c. A kitchen equipped with a range (vented hood), garbage disposal, microwave oven, refrigerator with freezer, and cooking and eating utensils.
- d. A utility room equipped with clothes washer and dryer.

- e. A day room equipped with chairs, couch, and a color television with clear reception of basic, locally available channels.
- f. A private bathroom for each bedroom, with toilet, wash basin, and shower.
- g. Daily maid and janitorial service; weekly linen service.
- h. A telephone and answering machine with a single party line.

The Contractor shall furnish and install utilities, providing connections to service locations. Accommodations shall be in place and connected by start of initial setup work at the job site and maintained through final cleanup. All costs shall be borne by the Contractor and included in the contract price, except that long distance charges incurred by the Government representative will be paid for by the Government upon arrangement with the Contracting Officer.

1.12 PARTNERING

The Government intends to encourage the foundation of a cohesive partnership with the Contractor and its subcontractors. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance, intended to achieve completion within budget, on schedule, and in accordance with plans and specifications.

This partnership will be bilateral in makeup, and participation will be totally voluntary. Any costs associated with effectuating this partnership will be agreed to by both parties and will be shared equally with no change in contract price. To implement this partnership initiative, it is anticipated that within 90 days of Notice to Proceed the Contractor's on-site project manager and the Government's on-site representative will attend a partnership development seminar followed by a team-building workshop to be attended by the Contractor's key on-site staff and Government's personnel. Follow-up workshops will be held periodically throughout the duration of the contract as agreed to by the Contractor and the Government.

This partnership will be bilateral in makeup, and participation will be totally voluntary. Implementation of this initiative will be a topic of discussion at the Preconstruction Conference. Other recurring or special purpose meetings, as agreed between the Government and the Contractor, will be held as necessary to resolve contentious issues and maintain the partnering spirit.

1.13 OPERATION AND MAINTENANCE (O & M) MANUALS

Six copies shall be submitted to the Contracting Officer not later than 30 days prior to scheduled contract completion. Failure to submit manuals by this date will be considered cause to withhold any payments due the Contractor. All equipment manual materials shall be durable, clearly printed or reproduced copies, not more than 216 x 280 mm in size, or neatly folded to that size without overlapping into the binding.

Materials shall be indexed and bound in stiff covers with tab separators. Approval of manuals shall be obtained prior to scheduling operating tests and field training courses.

1.14 VIDEOTAPING OF TESTS AND O & M TRAINING

The Contractor shall videotape tests and operation and maintenance training sessions required in the technical specifications for mechanical and electrical features. Videotapes shall be produced in the VHS format and of professional quality. Approval of applicable O & M manuals shall be obtained and manuals provided on site at least 3 days prior to tests and training as specified. Each system or piece of equipment shall be covered in a single tape or set of tapes which shall be correlated with the approved O & M manuals. Videotapes shall be categorized and indexed by equipment and item of repair, with a typed or printed label showing the project, equipment or system and contract number; this same information shall be provided as an introduction on each video tape. One copy of the videotaped material shall be submitted to the Contracting Officer, for review, within ten (10) days after completion of the videotaped training session. Coverage shall include, as applicable:

- a. Testing, trouble-shooting, repair of heating, ventilation, diesel-generator and boiler controls.
- b. Demonstration of common maintenance items, i.e. system tests (efficiency and operability), cleaning, adjustment, replacement of high failure items, scheduled maintenance, tear down and repair of specific items, etc.
- c. Testing of fire suppression and detection systems. Resetting of systems after activation. Trouble-shooting, actual maintenance and repair of specific components, etc.
- d. How to verify system performance and operating parameters (i.e. flows, temperatures, pressures, amperage draw, etc.).

1.15 HEALTH HAZARD ASBESTOS

Minor amounts of asbestos may be present within building materials encountered while working with existing insulation, piping and equipment. The Contractor shall determine the presence of asbestos and, if present, notify the Contracting Officer immediately and provide safeguards and disposal methods, including work practices, respiratory protection and industrial hygiene measures, that satisfy 29 CFR 1910 and 29 CFR 1926.58. An equitable adjustment will be made to the contract for additional work required if asbestos is present. Removal and disposal shall also satisfy 40 CFR 61.140 through 61.156, with disposal satisfying 61.146(c) (1).

1.16 EARTHQUAKE-RESISTANT EQUIPMENT SUPPORTS

All items of electrical, mechanical, and other installed equipment shall be mounted to prevent damage from lateral motion caused by earthquake. Restraints for seismic loading shall comply with requirements in TI 809-04. Any hooks from which light fixtures or other equipment are suspended shall

be closed. Light fixtures in suspended ceilings shall have secondary support from main structural framing of ceiling or roof system. Items of suspended or supported equipment subject to causing damage by swaying or tipping shall be cross-braced or laterally secured to the building structure. Any items of equipment mounted without rigid restraint of lateral motion shall have sufficient clearances and flexibility of associated wiring, piping, or other connections to accommodate the full range of such motion as might occur.

1.17 NPDES

Work shall comply with EPA National Pollutant Discharge Elimination System (NPDES General Permit No. AK-R-10-0000 for Construction Activities). See SECTION 01355 ENVIRONMENTAL PROTECTION for additional specific requirements.

1.17.1 Storm Water Pollution Prevention Plan

The Contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with NPDES permit FR-1 dated July 2003, pages 39087 - 39091. Permit, form, and guidance is located at:

<http://www.cfpub.epa.gov/npdes/stormwater/cgp.cfm>

The Contracting Officer will retain authority assigned therein to the State. The SWPPP shall be submitted to the Contracting Officer for review and approval as part of the Environmental Protection Plan specified in SECTION 01355 ENVIRONMENTAL PROTECTION.

1.17.2 Notice of Intent

The Contractor shall complete EPA Form 3510-9, "Notice of Intent for Storm Water Discharges Associated with Construction Activity Under a NPDES General Permit", in accordance with the aforementioned manual. A copy of the form is attached hereto and made a part of these specifications. The Contractor shall complete and submit the form, along with the SWPPP and a one page description of the project, to the Contracting Officer for review.

1.17.3 Filing

Upon receipt of satisfactory submittal from the Contractor, the Government will promptly complete a separate 3510-9 and forward both the Contractor-prepared and Government-prepared forms to the NPDES Program Director. In accordance with applicable requirements, no onsite work shall be performed until two days after the documents have been post marked, notwithstanding any other provisions of the contract.

1.17.4 ADEC

The Government will forward copies of both Form 3510-9's, along with the SWPPP and the one-page project description, to the State of Alaska Department of Environmental Conservation (ADEC) in accordance with State of Alaska regulations. The final plans and specifications will be included. The Contractor shall pay the fee required for review in accordance with 18 AAC 72.

1.17.5 Notice of Termination

Upon completion of work at the project site, the Contractor shall prepare EPA Form 3510-7, Notice of Termination of Coverage Under the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity, in accordance with the requirements stated on the form. A copy of the form permit and guidance is available from the EPA at:

<http://www.cfpub.epa.gov/npdes/stormwater/cgp.cfm>

The completed form shall be submitted to the Contracting Officer within 10 days after the earliest date that final site conditions meet filing requirements. The Government will forward the form to the NPDES Program Director.

1.18 NON-GOVERNMENT BORROW SOURCES

The Contractor shall check any non-Government, proposed borrow sources for the presence of hazardous substances and petroleum products as defined in ASTM E 1527. The publication includes guidance on previously examined sites. A Phase I Environmental Site Assessment, also as defined therein, shall be submitted for each proposed borrow site as a supplement to the Environmental Protection Plan specified in SECTION 01355 ENVIRONMENTAL PROTECTION. The report shall identify any previous or current presence of hazardous substances at the site, regardless of whether they have been, or can be, released to the environment. The Assessment shall be performed under the direct supervision of an independent, registered professional engineer, currently licensed by the State in which the borrow source is located, and within such time frame as will ensure reports are valid when submitted. The engineer shall have a minimum of 3 years experience in performing satisfactory Environmental Site Assessments. All reports shall be certified in writing by the engineer and submitted in the standard format specified in the referenced publication, through the Contracting Officer, to the Base Environmental Office for review. Reports shall be submitted at least 30 days prior to needing borrow materials in the work. The qualifications of the engineer performing the Assessment shall be included with the report. Where hazardous materials are indicated, use of the source will not be allowed. No borrow materials shall be brought onto Government property without approval of the Contracting Officer. The Government reserves the right to sample and test any borrow materials delivered to the project for conformance with this specification.

1.19 BIRDS' PROTECTION

Federal and State law protects the Cliff Swallows that build mud nests on Base/Post facilities. Once the Cliff Swallow establishes nest and lays eggs, then the nest cannot be removed or annoyed until the nests are no longer occupied. Forcing or annoying the birds to abandon an occupied nest is a violation of State and Federal law. Any work including demolition of known Cliff Swallows nesting areas (i.e., eaves, porches, entranceways, tanks, etc.) shall be done prior to 10 May or after 1 August to avoid project delays.

The Contractor shall initiate a program to remove the partially completed nests daily from 10 May to 21 July to avoid work stoppage. The Contractor is responsible for all or any delays and charges filed by U.S. Fish and Wildlife Service and the State of Alaska Department of Public Safety due to his/her negligence in removing and/or annoying such established nests.

1.20 ATTACHMENTS

AF Form 592
AF Form 103
EPA Form 3510-9
EPA Form 3510-7

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

S A M P L E L E T T E R

Contracting Officer

Date _____

Address (as stated in Notice of Award)

SUBJECT: Warranty Provisions, Contract

GENTLEMEN:

This is to acknowledge our responsibility in connection with the warranty provisions of this contract as set forth in the contract specifications.

The following items, equipment or systems furnished or installed under this contract are hereby warranted against defective design, material and workmanship for a period as indicated:

Warranted Item, Equipment or System	Identification Serial Number, Etc.	Warranty Expires at 11:59 PM Std. Time
_____	_____	_____
_____	_____	_____
_____	_____	_____

Upon receipt of notice from the Government of failure of any part or parts of the warranted item, equipment, or system during the warranty period, the affected part or parts will be replaced promptly with new parts. Such replacement will include furnishing and installing the new part or parts, making all necessary repairs, restoring the item, equipment, or system to the operating condition specified in this contract and making all such tests as are necessary to ensure that there are no remaining defects. Such tests will be performed in the presence of the Representative of the Using Agency indicated below.

We are responsible to _____ for the warranty provisions of this contract. Correspondence regarding the failure of any of the preceding items, equipment or systems covered by the warranty provisions of this contract should be addressed to:

_____	Telephone Number:
_____	_____
_____	_____

Very truly yours,

Signed: _____

Title: _____

Organization: _____

USAF WELDING, CUTTING AND BRAZING PERMIT (AF FORM 592)

THIS PERMIT WILL BE RETAINED AT THE WORKSITE UNTIL THE JOB IS COMPLETED WITH A COPY RETAINED BY THE FIRE DEPARTMENT. PERMITS ARE NOT REQUIRED FOR WELDING SHOPS OR OTHER AREAS APPROVED BY THE FIRE DEPARTMENT.

1. CONTROL NUMBER FC-109	
2. DATE PERMIT ISSUED 21 OCT 1980	
3. TIME PERMIT ISSUED 1510	
4. EXPIRATION (DAY AND MONTH) 21 OCT 80 - 1710	
5. AIRCRAFT TAIL NO. 701	
6. FACILITY NO. 701	
7. OPEN AREA (Specify) INSIDE	
8. OPERATION TO BE PERFORMED WELD AFTERBURNER	
9. FIRE WATCH IS REQUIRED DURING OPERATION AND 30 MINUTES THEREAFTER <input checked="" type="checkbox"/>	
10. AN AFTER OPERATION INSPECTION IS REQUIRED CALL 6144 AFTER COMPLETION OF OPERATION AND REMAIN UNTIL ARRIVAL OF FIRE INSPECTOR.	
11. CALL UPON COMPLETION OF OPERATION	
12. SPECIAL PRECAUTIONS WATCH FOR FUEL VENTING RAPE OFF AIRCRAFT REMOVE UNNECESSARY PETROLEUM AREA STOP IMMEDIATELY IF A FUEL LEAK OCCURS	
13. THE LOCATION WHERE THIS WORK IS TO BE DONE HAS BEEN EXAMINED. NECESSARY PRECAUTIONS TAKEN TO PROVIDE A FIRE SAFE ENVIRONMENT. AND PERMISSION IS GRANTED FOR THIS WORK.	
SIGNATURE OF FIRE INSPECTOR ISSUING THE PERMIT W. W. W. W. W.	
14. I AM FULLY QUALIFIED TO PERFORM THIS OPERATION AND UNDERSTAND MY RESPONSIBILITIES AS OUTLINED IN AFPM 11-1 AND 11-11.	
SIGNATURE OF OPERATOR OR ON-SCENE SUPERVISOR W. W. W. W.	
15. AN AFTER OPERATION INSPECTION HAS BEEN PERFORMED AND THE AREA IS DECLARED SAFE.	
SIGNATURE OF FIRE INSPECTOR W. W. W. W.	
DATE 21 OCT 80	
TIME 1510	
NAME AND ORGANIZATION OF CALLER	
DATE	
TIME	

DATE AND TIME PERMIT ISSUED

IDENTIFY AIRCRAFT TAIL NUMBER OR BUILDING NUMBER AND FLOOR NUMBER.

BRIEF DESCRIPTION OF WORK

CHECK IF FOLLOW-UP INSPECTION NEEDED AND ENTER FIRE INSPECTOR'S PHONE NUMBER.

FILLED OUT BY FIRE INSPECTOR.

FIRE INSPECTOR'S SIGNATURE

AFTER COMPLETION INSPECTION AND SIGNATURE OF FIRE INSPECTOR

CONTROL NUMBER (OPTIONAL)

DATE AND TIME PERMIT EXPIRES

IDENTIFY LOCATION IF WELDING IN AN OPEN AREA.

CHECK IF FIRE WATCH REQUIRED.

CHECK IF ONLY NOTIFICATION OF COMPLETION IS NEEDED. ENTER FIRE INSPECTOR'S PHONE NUMBER.

OPERATOR OR ON-SCENE SUPERVISOR SIGNS HERE.

CHECK IF OPERATOR OR FIRE WATCH CALLS TO INDICATE JOB IS COMPLETE AND THE AREA IS SAFE. FILL IN CALLER'S NAME, DATE AND TIME.

AF FORM 592

BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST						DATE PREPARED	
(See Instructions on Reverse)							
1. Clearance is requested to proceed with work at _____							
on Work Order No. _____, Contract No. _____, involving excavation or utility disturbance per							
attached sketch. This area <input type="checkbox"/> has <input type="checkbox"/> has not been staked or clearly marked.							
2. TYPE OF FACILITY/WORK INVOLVED							
A. PAVEMENTS		D. FIRE DETECTION & PROTECTION SYSTEMS			G. AIRCRAFT OR VEHICULAR TRAFFIC FLOW		
B. DRAINAGE SYSTEMS		E. UTILITY		OVERHEAD	UNDERGROUND	H. SECURITY	
C. RAILROAD TRACKS		F. COMM		OVERHEAD	UNDERGROUND	I. OTHER	
3. DATE CLEARANCE REQUIRED					4. DATE OF CLEARANCE		
5. SIGNATURE OF REQUESTING OFFICIAL					6. TELEPHONE NO.		7. ORGANIZATION
ORGANIZATION			REMARKS (Use Reverse for additional comments)			REVIEWER'S NAME AND INITIALS	
8. B A S E C I V I L E N G I N E E R I N G	A. ELECTRICAL DISTRIBUTION						
	B. STEAM DISTRIBUTION						
	C. WATER DISTRIBUTION						
	D. POL DISTRIBUTION						
	E. SEWER DISTRIBUTION						
	F. ENVIRONMENTAL						
	G. PAVEMENTS/ GROUNDS						
	H. FIRE PROTECTION						
	I. ZONE _____						
	J. OTHER (Specify)						
9. SECURITY POLICE							
10. SAFETY							
11. COMMUNICATIONS							
12. BASE OPERATIONS							
13. CABLE TV							
14. COMMERCIAL UTILITY COMPANY							
<input type="checkbox"/> TELEPHONE							
<input type="checkbox"/> GAS							
<input type="checkbox"/> ELECTRIC							
15. OTHER (Specify) _____							
16. REQUESTED CLEARANCE <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED							
17. TYPED NAME AND SIGNATURE OF APPROVING OFFICER (Chief of Operations Flight or Chief of Engineering Flight)						17a. DATE SIGNED	

INSTRUCTIONS

The BCE work clearance request is used for any work (contract or in-house) that may disrupt aircraft or vehicular traffic flow, base utility services, protection provided by fire and intrusion alarm system, or routine activities of the installation. This form is used to coordinate the required work with key base activities and keep customer inconvenience to a minimum. It is also used to identify potentially hazardous work conditions in an attempt to prevent accidents. The work clearance request is processed just prior to the start of work. If delays are encountered and the conditions at the job site change (or may have changed) this work clearance request must be reprocessed.

18. REMARKS. *(This section must describe specific precautionary measure to be taken before and during work accomplishment. Specific comments concerning the approved method of excavation, hand or powered equipment, should be included.)*

THIS FORM REPLACES PREVIOUS FORM 3510-6 (8-98)
See Reverse for Instructions

Form Approved. OMB No. 2040-0188

NPDES
FORMUnited States Environmental Protection Agency
Washington, DC 20460Notice of Intent (NOI) for Storm Water Discharges Associated with
CONSTRUCTION ACTIVITY Under a NPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with construction activity in the State/Indian Country Land identified in Section II of this form. Submission of this Notice of Intent also constitutes notice that the party identified in Section I of this form meets the eligibility requirements in Part I.B. of the general permit (including those related to protection of endangered species determined through the procedures in Addendum A of the general permit), understands that continued authorization to discharge is contingent on maintaining permit eligibility, and that implementation of the Storm Water Pollution Prevention Plan required under Part IV of the general permit will begin at the time the permittee commences work on the construction project identified in Section II below. IN ORDER TO OBTAIN AUTHORIZATION, ALL INFORMATION REQUESTED MUST BE INCLUDED ON THIS FORM. SEE INSTRUCTIONS ON BACK OF FORM.

I. Owner/Operator (Applicant) Information

Name: _____ Phone: _____
Address: _____ Status of Owner/Operator: ☐
City: _____ State: _____ Zip Code: _____

II. Project/Site Information

Is the facility located on Indian
Country Lands?Yes ☐ No ☐

Project Name: _____
Project Address/Location: _____
City: _____ State: _____ Zip Code: _____
Latitude: _____ Longitude: _____ County: _____

Has the Storm Water Pollution Prevention Plan (SWPPP) been prepared? Yes ☐ No ☐Optional: Address of location of
SWPPP for viewing ☐ Address in Section I above ☐ Address in Section II above ☐ Other address (if known) below:

SWPPP Address: _____ Phone: _____
City: _____ State: _____ Zip Code: _____

Name of Receiving Water: _____

Month Day Year_____
Month Day Year

Estimated Construction Start Date

Estimated Completion Date

Estimate of area to be disturbed (to nearest acre): _____

Estimate of Likelihood of Discharge (choose only one):

1. ☐ Unlikely 3. ☐ Once per week 5. ☐ Continual
2. ☐ Once per month 4. ☐ Once per day

Based on instruction provided in Addendum A of the permit, are there any listed endangered or threatened species, or designated critical habitat in the project area?

Yes ☐ No ☐

I have satisfied permit eligibility with regard to protection of endangered species through the indicated section of Part I.B.3.e.(2) of the permit (check one or more boxes):

(a) ☐ (b) ☐ (c) ☐ (d) ☐

III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____ Date: _____

Signature: _____



Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity to be Covered Under a NPDES Permit

Who Must File a Notice of Intent Form

Under the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.; the Act), except as provided by Part I.B.3 the permit, Federal law prohibits discharges of pollutants in storm water from construction activities without a National Pollutant Discharge Elimination System Permit. Operator(s) of construction sites where 5 or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least 5 acres, or any site designated by the Director, must submit an NOI to obtain coverage under an NPDES Storm Water Construction General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a State agency, write to or telephone the Notice of Intent Processing Center at (703) 931-3230.

Where to File NOI Form

NOIs must be sent to the following address:

Storm Water Notice of Intent (4203)
USEPA
401 M. Street, SW
Washington, D.C. 20460

Do not send Storm Water Pollution Prevention Plans (SWPPPs) to the above address. For overnight/express delivery of NOIs, please include the room number 2104 Northeast Mall and phone number (202) 260-9541 in the address.

When to File

This form must be filed at least 48 hours before construction begins.

Completing the Form

OBTAIN AND READ A COPY OF THE APPROPRIATE EPA STORM WATER CONSTRUCTION GENERAL PERMIT FOR YOUR AREA. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, call the Notice of Intent Processing Center at (703) 931-3230.

Section I. Facility Owner/Operator (Applicant) Information

Provide the legal name, mailing address, and telephone number of the person, firm, public organization, or any other entity that meet either of the following two criteria: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have the day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. Each person that meets either of these criteria must file this form. Do not use a colloquial name. Correspondence for the permit will be sent to this address.

Enter the appropriate letter to indicate the legal status of the owner/operator of the project: F = Federal; S = State; M = Public (other than federal or state); P = Private.

Section II. Project/Site Information

Enter the official or legal name and complete street address, including city, county, state, zip code, and phone number of the project or site. If it lacks a street address, indicate with a general statement the location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility in degrees, minutes, and seconds to the nearest 15 seconds. The latitude and longitude of your facility can be located on USGS quadrangle maps. Quadrangle maps can be obtained by calling 1-800 USA MAPS. Longitude and latitude may also be obtained at the Census Bureau Internet site: <http://www.census.gov/cgi-bin/gazetteer>.

Latitude and longitude for a facility in decimal form must be converted to degrees, minutes and seconds for proper entry on the NOI form. To convert decimal latitude or longitude to degrees, minutes, and seconds, follow the steps in the following example.

Convert decimal latitude 45.1234567 to degrees, minutes, and seconds.

- 1) The numbers to the left of the decimal point are degrees.
- 2) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006. $1234 \times 0.006 = 7.404$.
- 3) The numbers to the left of the decimal point in the result obtained in step 2 are the minutes: 7'.
- 4) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result in step 2 by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24".
- 5) The conversion for 45.1234 = 45° 7' 24".

Indicate whether the project is on Indian Country Lands.

Indicate if the Storm Water Pollution Prevention Plan (SWPPP) has been developed. Refer to Part IV of the general permit for information on SWPPPs. To be eligible for coverage, a SWPPP must have been prepared.

Optional: Provide the address and phone number where the SWPPP can be viewed if different from addresses previously given. Check appropriate box.

Enter the name of the closest water body which receives the project's construction storm water discharge.

Enter the estimated construction start and completion dates using four digits for the year (i.e. 05/27/1998).

Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest acre; if less than 1 acre, enter "1." Note: 1 acre = 43,560 sq. ft.

Indicate your best estimate of the likelihood of storm water discharges from the project. EPA recognizes that actual discharges may differ from this estimate due to unforeseen or chance circumstances.

Indicate if there are any listed endangered or threatened species, or designated critical habitat in the project area.

Indicate which Part of the permit that the applicant is eligible with regard to protection of endangered or threatened species, or designated critical habitat.

Section III. Certification

Federal Statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:


For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner of the proprietor, or

For a municipality, state, federal, or other public facility: by either a principal executive or ranking elected official. An unsigned or undated NOI form will not be granted permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

THIS FORM REPLACES PREVIOUS FORM 3510-7 (8-92) Please See Instructions Before Completing This Form		Form Approved. OMB No. 2040-0088 Approval expires: 8-31-98
NPDES FORM		<div style="text-align: center;">United States Environmental Protection Agency Washington, DC 20460</div> <div style="text-align: center;">Notice of Termination (NOT) of Coverage Under a NPDES General Permit for Storm Water Discharges Associated with Industrial Activity</div>
Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.		
I. Permit Information		
NPDES Storm Water General Permit Number: <input style="width: 150px;" type="text"/> Check Here if You are No Longer the Operator of the Facility: <input style="width: 30px;" type="checkbox"/> Check Here if the Storm Water Discharge is Being Terminated: <input style="width: 30px;" type="checkbox"/>		
II. Facility Operator Information		
Name: <input style="width: 550px;" type="text"/> Phone: <input style="width: 100px;" type="text"/>		
Address: <input style="width: 590px;" type="text"/>		
City: <input style="width: 400px;" type="text"/> State: <input style="width: 30px;" type="text"/> ZIP Code: <input style="width: 150px;" type="text"/>		
III. Facility/Site Location Information		
Name: <input style="width: 550px;" type="text"/>		
Address: <input style="width: 590px;" type="text"/>		
City: <input style="width: 400px;" type="text"/> State: <input style="width: 30px;" type="text"/> ZIP Code: <input style="width: 150px;" type="text"/>		
Latitude: <input style="width: 50px;" type="text"/> Longitude: <input style="width: 50px;" type="text"/> Quarter: <input style="width: 30px;" type="text"/> Section: <input style="width: 30px;" type="text"/> Township: <input style="width: 50px;" type="text"/> Range: <input style="width: 30px;" type="text"/>		
IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.		
Print Name: <input style="width: 550px;" type="text"/> Date: <input style="width: 100px;" type="text"/>		
Signature: <input style="width: 550px;" type="text"/>		
<div style="text-align: center;">Instructions for Completing Notice of Termination (NOT) Form</div> <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><p>Who May File a Notice of Termination (NOT) Form</p><p>Permittees who are presently covered under an EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit (including the 1995 Multi-Sector Permit) for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26(b)(14), or when they are no longer the operator of the facilities.</p><p>For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.</p></div><div style="width: 45%;"><p>Where to File NOT Form</p><p>Send this form to the the following address:</p><p style="margin-left: 40px;">Storm Water Notice of Termination (4203) 401 M Street, S.W. Washington, DC 20460</p><p>Completing the Form</p><p>Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, telephone or write the Notice of Intent Processing Center at (703) 931-3230.</p></div></div>		

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, telephone or write your EPA Regional storm water contact person.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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SECTION 01180

RADIOACTIVE MATERIALS PROCEDURES

PART 1 GENERAL

1.1 SCOPE

This section covers the use of items containing radioactive substances, such as soil density measuring devices, on military property or installations.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. AIR FORCE (USAF)

AFI 40-201	Managing Radioactive Material in the Air Force
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U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 0-199	Code of Federal Regulations, Title 10, Chapter I, Nuclear Regulatory Commission (NRC)
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1.3 REQUIREMENTS

Use of radioactive material on military property or installations shall conform to the following requirements.

1.3.1 Standards

The Contractor shall comply with 10 CFR 0-199 and AFI 40-201.

1.3.2 Usage Request

The Contractor shall submit a temporary radioactive material usage request, through the Contracting Officer, to the Base Radiation Safety Officer (RSO), Bioenvironmental Engineering Services. Submittal shall be made at least 60 days prior to the desired start date or date of arrival of the material, whichever is sooner, for NRC licensed items, and at least 120 days prior to such date for items which do not require an NRC license, such as certain density gages. The request shall include the following information:

- a. A detailed description of the proposed activities or usage, to

include safety precautions to be enforced.

b. A copy of the written procedures established by the Contractor to ensure the radiological health and safety of Air Force personnel and the public while the material is on an Air Force installation.

c. A copy of the applicable NRC or Agreement State License possessed by the Contractor, if available. If the material is not controlled by the NRC, the Contractor shall provide a complete and accurate NRC Form 313 for each type of unit to be used, with all necessary supporting documentation, for review and subsequent forwarding to the USAF Radioisotope Committee (RIC), requesting an Air Force Radioactive Materials Use Permit be granted the Contractor for the specified period of use.

NOTE: The RIC may temporarily deny the request until additional information they require for evaluation is provided, or may totally deny the request if the Contractor's proposal does not meet 10 CFR 0-199, AFI 40-201, or other Air Force requirements. An additional 90 day period will be required for review of each additional submittal to the RIC. A decision of the RIC to totally deny a permit will be considered final.

d. A copy of the NRC Form 241 or a similar document for each specific licensable item the Contractor wishes to use.

e. A copy of the contract section(s) describing the work to be performed, and the inclusive dates during which the work will be conducted.

f. The Contractor shall also provide documentation of the names and qualifications of all personnel who will handle, store, transport and/or use the radioactive material proving that they are properly trained to perform these functions. Specific documentation (such as course completion certificates and in-house training certifications and plans) shall be included to show that these personnel are properly trained in accordance with the stipulations of the license(s) or the proposed permit.

1.4 INITIAL NOTIFICATION

Once the Contractor has received written approval for use of the radioactive material through the Contracting Officer, the radioactive material may be brought onto the installation. The Contractor shall notify the RSO immediately upon bringing the material onto the installation, and again 3 working days prior to the initial use of the materials.

1.5 COMPLETE NOTIFICATION

The Contractor shall notify the RSO immediately upon completion of use, and when the material is removed from the installation.

1.6 VIOLATIONS

The Contractor will be subject to inspection by the Contracting Officer, the RSO, and Federal and State agencies or their designated representatives at all times when the materials are on the installation. Any violations of the conditions of the approval, or of applicable regulations, will require immediate cessation of work until the cause is corrected, and written approval for re-start of work is received by the Contracting Officer from the RSO. All delays, down time, etc. incurred as a result of such cessation of work shall be at the Contractor's expense.

1.7 ACCIDENTS

Accidents or incidents involving the radioactive material, and any known or potential exposure of Contractor or non-Contractor personnel to radiation, shall be reported immediately to the RSO and the Contracting Officer, and operations suspended until the circumstances have been evaluated by the RSO, and approval for the re-start has been received by the Contracting Officer.

PART 2 PRODUCTS - NOT USED

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3.1 CONTRACT COST BREAKDOWN

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SECTION 01271

MEASUREMENT, PAYMENT, AND CONTRACT COST BREAKDOWN

PART 1 GENERAL

1.1 MEASUREMENT

1.1.1 Lump Sum

Each lump sum item will be measured for payment as a complete item.

1.2 PAYMENT

Payment will be made at the contract Lump Sum price. The price for each item shall constitute full compensation for furnishing all labor, equipment, and materials, and performing all operations necessary to construct and complete the work in accordance with the specifications and drawings. Payment shall be considered as full compensation, notwithstanding that minor features of the work to complete the item may not be mentioned. Work paid for under one item will not be paid for under any other item.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 CONTRACT COST BREAKDOWN

The Contractor shall furnish within 30 days after the date of Notice to Proceed, and prior to the submission of its first partial payment estimate, a breakdown of its lump-sum pay item or items which will be reviewed by the Contracting Officer as to propriety of distribution of the total cost to the various accounts. Any unbalanced items as between early and late payment items or other discrepancies will be revised by the Contracting Officer to agree with a reasonable cost of the work included in the various items. This contract cost breakdown will then be utilized as the basis for progress payments to the Contractor.

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PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

-- End of Section Table of Contents --

SECTION 01312

QUALITY CONTROL SYSTEM (QCS)

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

- Administration
- Finances
- Quality Control
- Submittal Monitoring
- Scheduling
- Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", SECTION 01320 PROJECT SCHEDULE, SECTION 01330 SUBMITTAL PROCEDURES, and SECTION 01451 CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to

download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

Hardware

IBM-compatible PC with 500 MHz Pentium or higher processor

128+ MB RAM

4 GB hard drive disk space for sole use by the QCS system

3-1/2 inch high-density floppy drive

Compact disk (CD) Reader

Color monitor

Laser printer compatible with HP LaserJet III or better, with minimum 4 MB installed memory.

Connection to the Internet, minimum 56 Kbps

Software

MS Windows 98 or newer version operating system (MS Windows NT 4.0 or newer is recommended)

Word Processing software compatible with MS Word 97 or newer

Internet browser

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) compatible with MS Outlook

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a

CD-ROM containing these instructions.

1.4.2 Contractor Quality Control (CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001 (e.g., H-0001 or S-0001). The Government's letters to

the Contractor will be prefixed with "C".

1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 Finances

1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data shall automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in SECTION 01451 CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by SECTION 01451 CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor shall be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work

progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or SECTION 01320 PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF) (see SECTION 01320 PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs shall be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of

running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate, in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

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SECTION 01320

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SECTION 01320

PROJECT SCHEDULE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11 (1995) Progress, Schedules, and Network Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a Project Schedule as described below shall be prepared. The scheduling of construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, the Contracting Officer may hold retainage up to the maximum allowed by

contract, each payment period, until revisions to the Project Schedule have been made.

3.3 PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The Project Schedule shall include an appropriate level of detail. Failure to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.3 Critical Activities

The following activities shall be listed as separate line activities on the Contractor's project schedule:

- a. Submission and approval of mechanical/electrical layout drawings.
- b. Submission and approval of O & M manuals.

- c. Submission and approval of as-built drawings.
- d. Submission and approval of 1354 data and installed equipment lists.
- e. Submission and approval of testing and air balance (TAB).
- f. Submission of TAB specialist design review report.
- g. Submission and approval of fire protection specialist.
- h. Submission and approval of testing and balancing of HVAC plus commissioning plans and data.
- i. Air and water balance dates.
- j. HVAC commissioning dates.
- k. Controls testing plan.
- l. Controls testing.
- m. Performance Verification testing.
- n. Other systems testing, if required.
- o. Prefinal inspection.
- p. Correction of punchlist from prefinal inspection.
- q. Final inspection.

3.3.2.4 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.5 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, Contractor work force, or Government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.6 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

3.3.2.7 Modification or Claim Number

Any activity that is added or changed by contract modification or used to justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number. Whenever possible, changes shall be added to the schedule by adding new activities. Existing activities shall not normally be changed to reflect modifications.

3.3.2.8 Offer Item

All activities shall be identified in the project schedule by the Offer Item to which the activity belongs. An activity shall not contain work in more than one offer item. The offer item for each appropriate activity shall be identified by the Offer Item Code.

3.3.2.9 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

3.3.2.10 Category of Work

All Activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.11 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from NTP to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.4.3 Phase X

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control

report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating, shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

3.3.7 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval within 20 calendar days after the NTP is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP.

3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for approval within 40 calendar days after NTP. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgement of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic project schedule update throughout the life of the project:

3.5.1 Data Disks

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

3.5.1.1 File Medium

Required data shall be submitted on 3.5 in. disks, formatted to hold 1.44 MB of data, under the MS-DOS Version 5. or 6.x, unless otherwise approved by the Contracting Officer.

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number of the person responsible for the schedule, and the MS-DOS version used to format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by offer item and sorted by activity numbers. This report shall: sum all activities in an offer item and provide an offer item percent; and complete and sum all offer items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall

depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion date(s).

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will need to approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed.

3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

3.6.3.4 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include:

1. Delays beyond the Contractor's control, such as strikes and unusual weather.
2. Delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary.
3. Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as

the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will need to be approved by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions

furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

3.10 ATTACHMENT

Standard Data Exchange Format Specification (Appendix A)

APPENDIX A

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STANDARD DATA EXCHANGE FORMAT SPECIFICATION

PART 1- GENERAL

1. Application of This Provision: The Standard Data Exchange Format (SDEF) provides a non-proprietary protocol to exchange project planning and progress data between scheduling systems.

2. File Type and Format: The data file shall consist of a 132 character, freed format, "ASCII" file. Text shall be left-justified and numbers shall be right-justified in each field. Data records must conform, exactly, to the sequence, column position, maximum length, mandatory values, and field definitions described below to comply with the SDEF. Unless specifically stated, all numbers shall be whole numbers. Fields containing numbers shall not be zero filled. All data columns shall be separated by a single blank column. The file shall not contain blank lines.

3. Usage Notes: Where appropriate, notes regarding proper usage of systems to support the SDEF have been included in brackets ([]). These notes are included to assist users in creating SDEF-compatible files, given the variety of software systems that support the SDEF.

4. Recommended Systems: Several systems have been tested to determine the accuracy of importing and exporting SDEF files. For information on the current list of recommended systems, please contact Mr. Stan Green at HQUSACE, (202) 761-0206. Although the currently listed system have been tested other systems may also be acceptable provided those systems correctly import and export SDEF files.

5. SDEF Checker Program: A program that checks whether a file meets the SDEF is available free of charge. A copy of this program may be obtained by written request to: U.S. Army Corps of Engineers, ATTN: Mr. Bill East (CECER-FFA), P.O. Box 9005, Champaign, IL 61826-90005. A description of the SDEF Checker is also available on the Internet and CivilNet.

PART 2- SDEF SPECIFICATION

6. SDEF Organization: The SDEF shall consist of the following records provided in the exact sequence shown below:

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Paragraph Record

<u>Reference</u>	<u>Description</u>	<u>Remarks</u>
6.a	Volume Record	Mandatory First Line of File
6.b	Project Record	Mandatory Second Line of File
6.c	Calendar Record(s)	Mandatory One Record Minimum
6.d	Holiday Record(s)	Mandatory if Holidays Used
6.e	Activity Record(s)	Mandatory Records
6.f	Precedence Record(s)	Mandatory for Precedence
6.g	Unit Cost Record(s)	Mandatory for Unit Costs
6.h	Progress Record(s)	Mandatory Records
6.i	File End Record	Mandatory Last Line of Disk/File

6.a. Volume Record: The Volume Record shall be used to control the transfer of data that may not fit on a single disk. The first line in every file used to store SDEF data shall be the Volume Record. The Volume Record shall sequentially identify the number of the data transfer disk(s). The Volume Record shall have the following format:

<u>Description</u>	<u>Column</u> <u>Position</u>	<u>Max.</u> <u>Len.</u>	<u>Req.</u> <u>Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1 - 4	4	VOLM	Fixed	Filled
DISK NUMBER	6 - 7	2	√	Number	Right Justified

6.a.(1) The RECORD IDENTIFIER is the first four characters of this record. The required value for this field shall be "VOLM". The VOLM record must appear on the first line of the SDEF data file.

6.a.(2) The DISK NUMBER field shall identify the number of the data disk used to store the data exchange information. If all data may be contained on a single disk, this field shall contain the value of "1". If more disks are required, then the second disk shall contain the value "2", the third disk shall be designated with a "3", and so on. Identification of the last data disk is accomplished in the Reject End Record.

6.b. Project Record: The Project Identifier Record shall contain general project information. Because more than one SDEF file may be required for data transfer between large projects, the PROJ record shall be the second line of the first SDEF file transferred. The PROJ record shall contain information in the following format:

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<u>Description</u>	<u>Column Position</u>	<u>Max. Len.</u>	<u>Req. Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1- 4	4	PROJ	Fixed	Filled
DATA DATE	6- 12	7	√	ddmmmyy	Filled
PROJECT IDENTIFIER	14-17	4	√	Alpha.	Left Justified
PROJECT NAME	19-66	48	√	Alpha.	Left Justified
CONTRACTOR NAME	68-103	36	√	Alpha.	Left Justified
ARROW OR PRECEDENCE	105-105	1	A,P	Fixed	Filled
CONTRACT NUMBER	107-112	6	√	Alpha.	Left Justified
PROJECT START	114-120	7	√	ddmmmyy	Filled
PROJECT END	122-128	7	√	ddmmmyy	Filled

6.b.(1) The RECORD IDENTIFIER is the first four characters of this record. The required value for this field shall be "PROJ". This record shall contain the general project information and indicates which scheduling method shall be used.

6.b.(2) The DATA DATE is the date of the schedule calculation. The abbreviation "ddmmmyy" refers to a date format that shall translate a date into two numbers for the day, three letters for the month, and two numbers for the year. For example, March 1, 1999 shall be translated into 01Mar99. This same convention for date formats shall be used throughout the entire data format. To ensure that dates are translated consistently, the following abbreviations shall be used for the three character month code:

Abbreviation Month

JAN	January
FEB	February
MAR	March
APR	April
MAY	May
JUN	June
JUL	July
AUG	August
SEP	September
OCT	October
NOV	November
DEC	December

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6.b.(3) The PROJECT IDENTIFIER is a maximum four character abbreviation for the schedule. These four characters shall be used to uniquely identify the project and specific update as agreed upon by Contractor and Contracting Officer. When utilizing scheduling software these four characters shall be used to select the project. Software manufacturers shall provide information to users to ensure that data importing programs do not automatically overwrite other schedules with the same PROJECT IDENTIFIER.

6.b.(4) The PROJECT NAME field shall contain the name and location of the project edited to fit the space provided. The data appearing here shall appear on scheduling software reports. The abbreviation "Alpha." refers to an "Alphanumeric" field value and shall be used throughout the remainder of this specification.

6.b.(5) The CONTRACTOR NAME field shall contain the Construction Contractor's name, edited to fit the space provided.

6.b.(6) The ARROW OR PRECEDENCE field shall indicate which method shall be used for calculation of the schedule. The value "A" shall signify the Arrow Diagramming Method. The value "P" shall signify the Precedence Diagramming Method. The ACTIVITY ID field of the Activity Record shall be interpreted differently depending on the value of this field. The Precedence Record shall be required if the value of this field is "P". [Usage note: software systems may not support both arrow and precedence diagramming. It is recommended that the selection of the type of network be based on the capabilities of the software used by project partners.]

6.b.(7) The CONTRACT NUMBER field shall contain the contract number for the project. For example, the construction contract number DACA85-89-C-0001 shall be entered into this field as "890001".

6.b.(8) The PROJECT START field shall contain the date that the Contractor acknowledges the Notice to Proceed (NTP). [Usage note: Software systems may use a project start date to constrain the first activity of a network. To ensure consistent scheduling calculations across products, it is recommended that the first activity in the schedule contain an EARLY START constraint and a software system's PROJECT START date only be used to report on the project's start date.]

6.b.(9) The PROJECT END field shall contain the date that the Contractor plans to complete the work as approved by the Contracting Officer. [Usage note: software systems may use a project end date to constrain the last activity of a network. To ensure consistent scheduling calculations across products, it is recommended that the last activity in the schedule contain an EARLY START constraint and a software system's PROJECT END date only be used to report on the project's end date.]

6.c. Calendar Record: The Calendar Record(s) shall follow the Project Identifier Record in the first disk of data transferred. A minimum of one Calendar Record shall be required for all data exchange activity files. The format for the Calendar Record shall be as follows:

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<u>Description</u>	<u>Column Position</u>	<u>Max. Len.</u>	<u>Req. Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1 - 4	4	CLDR	Fixed	Filled
CALENDAR CODE	6 - 6	1	√	Alpha.	Filled
WORKDAYS	8 - 14		SMTWTFS	Fixed	Filled
CALENDAR DESCRIPTION	16-45	30	√	Alpha.	Left Justified

6.c.(1) The RECORD IDENTIFIER shall always begin with "CLDR" to identify it as a Calendar Record. Each Calendar Record used shall have this identification in the first four columns. [Usage note: Systems contain a variety of calendar options. It is recommended that the least common denominator of calendar features between the systems be used as the basis for creating the SDEF file for a given project.]

6.c.(2) The CALENDAR CODE shall be used in the activity records to signify that this calendar is associated with the activity. [Usage note: Some systems do not allow for alphanumeric CALENDAR CODES, but only allow positive integers from 1 to 9. It is recommended that only positive integers be used for the CALENDAR CODE field to support the widest variety of scheduling systems.]

6.c.(3) The WORKDAYS field shall contain the work-week pattern selected with "Y", for Yes, and "N", for No. The first character shall be Sunday and the last character Saturday. An example of a typical five (5) day work-week would be NYYYYYN. A seven (7) day work-week would be YYYYYYY.

6.c.(4) The CALENDAR DESCRIPTION shall be used to briefly describe the calendar used.

6.d. Holiday Record: The Holiday Record(s) shall follow the Calendar Record(s) in the first disk of data transferred. There may be calendars without any holidays designated or several Holiday Records for each Calendar Record(s). The format for the Holiday Record shall be as follows:

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<u>Description</u>	<u>Column Position</u>	<u>Max. Len.</u>	<u>Req. Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1 - 4	4	HOLI	Fixed	Filled
CALENDAR CODE	6 - 6	1	√	Alpha.	Filled
HOLIDAY DATE	8 - 14	7	√	ddmmmyy	Filled
HOLIDAY DATE	16-22	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	24-30	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	32-38	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	40-46	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	48-54	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	56-62	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	64-70	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	72-78	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	80-86	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	88-94	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	96-102	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	104-110	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	112-118	-	-	ddmmmyy	May be Filled
HOLIDAY DATE	120-126	-	-	ddmmmyy	May be Filled

6.d.(1) The RECORD IDENTIFIER shall always begin with "HOLI". Each Holiday Record used shall have this identification in the first four columns.

6.d.(2) The CALENDAR CODE indicates which work-week calendar the holidays shall be applied to. More than one HOLI record may be used for a given CALENDAR CODE.

6.d.(3) The HOLIDAY DATE shall contain the date of each individual non-work day.

6.e. Activity Records: Activity Records shall follow any Holiday Record(s). If there are no Holiday Record(s), then the Activity Records shall follow the Calendar Record(s). There shall be one Activity Record for every activity in the network. Each activity shall have one record in the following format:

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<u>Description</u>	<u>Column Position</u>	<u>Max. Len.</u>	<u>Req. Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1 - 4	4	ACTV	Fixed	Filled
ACTIVITY ID	6 - 15	10	✓	Integer	See Comment Below
ACTIVITY DESCR.	17-46	30	✓	Alpha.	Left Justified
ACTIVITY DURATION	48-50	3	✓	Integer	Right Justified
CONSTRAINT DATE	52-58	7		ddmmmyy	May be Filled
CONSTRAINT TYPE	60-61	2		ES or LF	May be Filled
CALENDAR CODE	63-63	1		Alpha.	Filled
HAMMOCK CODE	65-65	1	Y, blank	Fixed	May be Filled
WORKERS PER DAY	67-69	3		Integer	Right Justified
RESPONSIBILITY CODE	71-74	4		Alpha.	Left Justified
WORK AREA CODE	76-79	4		Alpha.	Left Justified
MOD OR CLAIM NO.	81-86	6		Alpha.	Left Justified
BID ITEM	88-93	6		Alpha.	Left Justified
PHASE OF WORK	95-96	2		Alpha.	Left Justified
CATEGORY OF WORK	98-98	1		Alpha.	May be Filled
FEATURE OF WORK	100-128	30		Alpha.	Left Justified

6.e.(1) The RECORD IDENTIFIER for each activity description record must begin with the four character "ACTV" code. This field shall be used for both the Arrow Diagram Method (ADM) and Precedence Diagram Method (PDM),

6.e.(2) The ACTIVITY ID consists of coding that shall differ, depending on whether the ADM or PDM method was selected in the Project Record. If the ADM method was selected then the field shall be interpreted as two right-justified fields of five (5) integers each. If the PDM method was selected the field shall be interpreted as one (1) right-justified field of ten (10) integers each. The maximum activity number allowed under this arrangement is 99999 for ADM and 999999999 for the PDM method. [Usage note: Many systems allow alphanumeric ACTIVITY IDs. While the SDEF does not strictly allow the use of alphanumeric values, users may agree to use the ACTIVITY ID field to exchange alphanumeric data. It is recommended that the ACTIVITY ID be restricted to integers when one or more of the systems being used for scheduling allows only integer ACTIVITY ID values.]

6.e.(3) The ACTIVITY DESCRIPTION shall be a maximum of 30 characters. Descriptions must be limited to the space provided.

6.e.(4) The ACTIVITY DURATION contains the estimated original duration for the activity on the schedule. The duration shall be based upon the work-week designated by the activity's related calendar.

6.e.(5) The CONSTRAINT DATE field shall be used to identify a date that the scheduling system may use to modify float calculations. If there is a date in this field, then there must be a valid entry in the CONSTRAINT TYPE field.

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6.e.(6) The CONSTRAINT TYPE field shall be used to identify the way that the scheduling system shall use the CONSTRAINT DATE to modify schedule float calculations. If there is a value in this field, then there must be a valid entry in the CONSTRAINT DATE field. The valid values for the CONSTRAINT TYPE are as follows:

Definition

The CONSTRAINT DATE shall replace an activity's early start date,
if the early start date is prior to the CONSTRAINT DATE.

The CONSTRAINT DATE shall replace an activity's late finish date,
if the late finish date is after the CONSTRAINT DATE.

[Usage note: Systems provide a wide variety of constraint types that may not be supported by other systems. It is recommended that constraint types be restricted to the values above regardless of the capabilities of the various systems being used for scheduling.]

6.e.(7) The CALENDAR CODE relates this activity to an appropriate work-week calendar. The ACTIVITY DURATION must be based on the valid work-week referenced by this CALENDAR CODE field.

6.e.(8) The HAMMOCK CODE indicates that a particular activity does not have its own independent duration, but takes its start dates from the start date of the preceding activity (or node) and takes its finish dates from the finish dates of its succeeding activity (or node). If the value of the HAMMOCK CODE field is "Y", then the activity is a hammock activity.

6.e.(9) The WORKERS PER DAY shall contain the average number of workers expected to work on the activity each day the activity is in progress. If this code is required by project scheduling specifications, values for this data will be right justified. Activities without workers per day shall have a value of "0".

6.e.(10) The RESPONSIBILITY CODE shall identify the subcontractors or major trade involved with completing the work for the activity. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(11) The WORK AREA CODE shall identify the location of the activity within the project. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(12) The MOD OR CLAIM NUMBER shall uniquely identify activities that are added or changed on a construction contract modification, or activities that justify any claimed time extensions. If this code is required by project scheduling specifications, value for this data will be left justified.

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6.e.(13) The BID ITEM shall identify the bid item number associated with each activity. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(14) The PHASE OF WORK shall identify the timing of a specific activity within the entire project. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(15) The CATEGORY OF WORK shall identify the general type of work performed by every activity. If this code is required by project scheduling specifications, value for this data will be placed in the field.

6.e.(16) The FEATURE OF WORK shall identify a very broad designation of the general type of work that is being accomplished by the activity. If this code is required by project scheduling specifications, value for this data will be left justified. [Usage note: Many systems require that FEATURE OF WORK values be placed in several activity code fields. It is recommended that users review SDEF documentation to determine the correct way to use a given software system to produce the FEATURE OF WORK code.]

6.f. Precedence Record: The Precedence Record(s) shall follow the Activity Records if a Precedence Diagram Method schedule (PDM) is identified in the ARROW OR PRECEDENCE field of the Project Record. The Precedence Record has the following format:

<u>Description</u>	<u>Column</u>	<u>Max.</u>	<u>Req.</u>	<u>Type</u>	<u>Notes</u>
	<u>Position</u>	<u>Len.</u>	<u>Value</u>		
RECORD IDENTIFIER	1 - 4	4	PRED	Fixed	Filled
ACTIVITY ID	6-15	10	√	Integer	See Comment Below
PRECEDING ACTIVITY	17 -26	10	√	Integer	See Comment Below
PREDECESSOR TYPE	28-28		√	S, F, C	Filled
LAG DURATION	30-33	4	√	Integer	Right Justified

6.f.(1) The RECORD IDENTIFIER shall begin with the four characters "PRED" in the first four columns of the record.

6.f.(2) The ACTIVITY ID identifies the activity whose predecessor shall be specified in this record.

6.f.(3) The PRECEDING ACTIVITY number is the number of an activity that precedes the activity noted in the ACTIVITY ID field.

6.f.(4) The PREDECESSOR TYPE field indicates the type of relation that exists between the chosen pair of activities. Valid PREDECESSOR TYPE fields areas follows:

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<u>Code</u>	<u>Definition</u>
S	Start-to-Start relation
F	Finish-to-Finish relation
C	Finish-to-Start relation

[Usage note: Some systems provide additional predecessor types that may not be supported by all other systems. It is recommended that predecessor types be restricted to the values above regardless of the capabilities of the various systems being used for scheduling.]

6.f.(5) The LAG DURATION field contains the number of days delay between the preceding and current activity. [Usage note: Some systems allow negative values for the LAG DURATION. Because these values are not supported by all other systems, it is recommended that values be restricted to zero and positive integers.]

6.g. Unit Cost Record: The Unit Cost Record shall follow all Precedence Records. If the schedule utilizes the Arrow Diagram Method, then the Unit Cost Record shall follow any Activity records. There shall be one Unit Cost Record for every activity that is not a lump sum activity. [Usage note: (1) It is recommended that users who wish to exchange unit cost data contact SDEF vendor representatives to determine the ability of the software system to import/export unit cost information. (2) If the software being used by each member of the project team supports unit cost data then users may wish to conduct a trial run of the SDEF data exchange with a two or three-activity network to ensure that unit cost data transfers as expected. If problems are found please consult vendor representatives for resolution prior to exchange of full project schedules. (3) Unit cost record data does not, in most systems, result in the correct values being placed in the ACTIVITY COST and COST TO DATE fields of the Progress (PROG) Record. Users must, at this time, manually transfer the data from the Unit Cost Record to the Progress Record.

The fields for this record shall take the following format:

<u>Description</u>	<u>Column</u> <u>Position</u>	<u>Max.</u> <u>Len.</u>	<u>Req.</u> <u>Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1 - 4	4	UNIT	Fixed	Filled
ACTIVITY ID	6-15	10	√	Integer	See Comment Below
TOTAL QTY	17-29	13	√	Format 8.4	Right Justified
COST PER UNIT	31-43	13	√	Format 8.4	Right Justified
QTY TO DATE	45-57	13	√	Format 8.4	Right Justified
UNIT OF MEASURE	59-61	3	√	Alpha.	Left Justified

6.g.(1) The RECORD IDENTIFIER shall be identified with the four characters 'UNIT' placed in the first four columns of the record.

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6.g.(2) The ACTIVITY ID for each activity shall match the format described in the activity record. Each activity may have only one Unit Cost Record.

6.g.(3) The TOTAL QTY is the total amount of material to be used in this activity. This number consists of eight digits, one decimal point and four more digits. An example of a number in this format is "1111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 25-29. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(4) The COST PER UNIT is the cost, in dollars and cents, for each unit to be used in this activity. This number consists of eight digits, one decimal point, and four more digits. An example of a number in this format is "1111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 39-43. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(5) The QTY TO DATE is the quantity of material installed in this activity up to the data date. This number consists of eight digits, one decimal point, and four more digits. An example of a number in this format is "1111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 53-57. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(6) The UNIT OF MEASURE is an abbreviation that may be used to describe the units being measured for this activity. Valid values for this field are any meaningful English or metric unit, except "LS" for Lump Sum. Lump Sum activities are not to have Unit Cost Records.

6.h. Progress Record: Progress Record(s) shall follow all Unit Cost Record(s). If there are no Unit Cost Record(s), then the Progress Record(s) shall follow all Precedence Records. If the schedule utilizes the Arrow Diagram Method, then the Progress Record shall follow any Activity Records. One Progress Record is required for every activity in the Activity Record. The fields for this Record shall be provided in the following format:

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<u>Description</u>	<u>Column Position</u>	<u>Max. Len.</u>	<u>Req. Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1-4	4	PROG	Fixed	Filled
ACTIVITY ID	6-5	10	√	Integer	See Comment Below
ACTUAL START DATE	17-23	7	√	ddmmmyy	Filled if Started
ACTUAL FINISH DATE	25-31	7	√	ddmmmyy	Filled if Finished
REMAINING DURATION	33-35	3	√	Integer	Right Justified
ACTIVITY COST	37-48	12	√	Format 9.2	Right Justified
COST TO DATE	50-61	12	√	Format 9.2	Right Justified
STORED MATERIAL	63-74	12	√	Format 9.2	Right Justified
EARLY START DATE	76-82	7	√	ddmmmyy	Filled if Not Started
EARLY FINISH DATE	84-90	7	√	ddmmmyy	Filled if Not Finished
LATE START DATE	92-98	7	√	ddmmmyy	Filled if Not Started
LATE FINISH DATE	100-1067		√	ddmmmyy	Filled if Not Finished
FLOAT SIGN	108-1081		+, -	Fixed	Filled if Not Finished
TOTAL FLOAT	110-1123		√	Integer	R. Just. if Not Finished

6.h.(1) The RECORD IDENTIFIER shall begin with the four characters "PROG" in the first four columns of the record.

6.h.(2) The ACTIVITY ID for each activity for which progress has been posted shall match the format described in the Activity Record.

6.h.(3) An ACTUAL START DATE is required for all in-progress activities. The ACTUAL START DATE shall be the same as, or later than, the PROJECT START date contained in the Project Record. The ACTUAL START DATE shall also be the same as, or prior to, the DATA DATE contained in the Project Record. If there is an ACTUAL START DATE for an activity that there must also be a REMAINING DURATION, and the values for the EARLY START DATE and LATE START DATE are blank. [Usage note: Some systems allow default values for ACTUAL START DATE if the date is not entered by the user. Because the failure to include a start date for activities may result in different schedule calculations, it is recommended that the ACTUAL START DATE be required for all activities in progress.]

6.h.(4) An ACTUAL FINISH DATE is required for all completed activities. If the REMAINING DURATION of an activity is zero, then there must be an ACTUAL FINISH DATE. If there is an ACTUAL FINISH DATE, then values for the EARLY START DATE, LATE START DATE, EARLY FINISH DATE, LATE FINISH DATE, FLOAT SIGN, and TOTAL FLOAT shall be blank. [Usage note: Some systems allow default values for ACTUAL FINISH DATE if the date is not entered by the user. Because the failure to include a finish date for activities may result in different schedule calculations, it is recommended that the ACTUAL FINISH DATE be required for all activities in progress.]

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6.h.(5) AREMAINING DURATION is required for all activities. Activities that have not started shall have a remaining duration equal to their original duration. Activities completed based on time, shall have a zero (0) REMAINING DURATION. [Usage note: Systems have a variety of "short-cut" methods to determine the REMAINING DURATION value. It is recommended that users actually consider the time required to complete the remaining work on a given task, rather than allow a system to calculate the remaining duration based on the amount of work that has already been accomplished.]

6.h.(6) The ACTIVITY COST contains the estimated earned value of the work to be accomplished in the activity. An example of a number in this format is "1111111 11.11". If decimal places are not needed this field shall still contain a ".00" in the last three columns of this field. [Usage note: Users should inquire of software vendors if the user needs to add a zero in the data field to produce the default value "0.00".]

6.h.(7) The COST TO DATE contains the earned value for the activity. If there is an ACTUAL START DATE, then there must also be some value for COST TO DATE. An example of a number in this format is "111111111.11". If decimal places are not needed, this field shall still contain a ".00" in the last three columns of this field. The COST TO DATE is not tied to REMAINING DURATION. For example, if the REMAINING DURATION is "0", the COST TO DATE may only be 95% of the ACTIVITY COST. This difference may be used to reflect 5% retainage for punch list items. [Usage note: Systems implement cost information in different ways. It is recommended that users carefully review SDEF documentation and test results to determine how to ensure that SDEF data is exported correctly.]

6.h.(8) The STORED MATERIAL field contains the value of the material that the Contractor has paid for and is on site or in secure storage areas that is a portion of the COST TO DATE. An example of a number in this format is "111111111.11". If decimal places are not needed, this field shall still contain a ".00" in the last three columns of this field. [Usage note: Systems implement the stored materials field in a variety of ways. Many systems do not enforce STORED MATERIAL + COST TO DATE < ACTIVITY COST. To avoid potential confusion between systems, it is recommended that new activities be added to a schedule to reflect the cost of large equipment procurement rather than use the STORED MATERIALS field.]

6.h.(9) The EARLY START DATE indicates the earliest date possible that an activity can start as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL START DATE, then this field shall be blank.

6.h.(10) The EARLY FINISH DATE indicates the earliest date possible that an activity can finish as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank.

6.h.(11) The LATE START DATE indicates the latest date that an activity can begin as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL START DATE, then this field shall be blank.

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6.h.(12) The LATE FINISH DATE indicates the latest date that an activity can finish as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank.

6.h.(13) The FLOAT SIGN indicates whether the float time calculated using a CPM scheduling system or other Contracting Officer approved planning method, is positive or negative in nature. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank. In the case of zero float this field shall be blank.

6.h.(14) The TOTAL FLOAT indicates the total float time. In the Precedence Diagram Method (PDM), the total float is the difference between the early and late start or finish dates. In the Arrow Diagram Method (ADM), the total float is equal to the late event time at the end of the activity, minus the sum of the early event time at the start of the activity plus the duration of the activity.

6.i. Project End Record: The Project End Record shall be used to identify that the data file is completed. If the ASCII End of File character is encountered, then data import programs shall use that character to infer that the data continues on the next disk. The user shall then be prompted for the next disk number, based on the VOLM record data. The Project End Record shall be the last record of the entire data file, and shall have the following format:

<u>Description</u>	<u>Column</u>	<u>Max.</u>	<u>Req.</u>		
	<u>Position</u>	<u>Len.</u>	<u>Value</u>	<u>Type</u>	<u>Notes</u>
RECORD IDENTIFIER	1-3	3	END	Fixed	Filled

6.i.(1) The RECORD IDENTIFIER for the Project End Record shall be "END". Data contained in the data exchange file that occurs after this record shall not be used.

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SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

1.1.1 Government-Furnished Information

Submittal register database and submittal management program will be delivered to the contractor, by contracting officer on 3 1/2 inch disk. Register database will have the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-04 Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Column (f): Indicate approving authority for each submittal. A "G" indicates approval by contracting officer; a blank indicates approval by QC manager.

The database and submittal management program will be extractable from the disk furnished to contractor, for operation on contractor's IBM compatible personal computer with 640kb RAM, a hard drive, and 3 1/2 inch high density floppy disk drive.

1.2 DEFINITIONS

1.2.1 Submittal

Shop drawings, product data, samples, operation and maintenance data, and administrative submittals presented for review and approval. Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals."

1.2.2 Types of Submittals

All submittals are classified as indicated in paragraph "Submittal Descriptions (SD)". Submittals also are grouped as follows:

a. Shop drawings: As used in this section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by contractor or through contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate portion of work.

b. Product data: Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate portion of work, but not prepared exclusively for this contract.

c. Samples: Physical examples of products, materials, equipment, assemblies, or workmanship that are physically identical to portion of work, illustrating portion of work or establishing standards for evaluating appearance of finished work or both.

d. Operation and Maintenance (O&M) Data: Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item. The data is required when the item is delivered to the project site.

e. Administrative submittals: Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.3 SUBMITTAL IDENTIFICATION (SD)

Submittals required are identified by SD numbers and titles as follows:

SD-01 Preconstruction Submittals

Certificates of insurance.
Surety bonds.
List of proposed subcontractors.
List of proposed products.
Construction Progress Schedule.
Submittal register.
Schedule of values.
Health and safety plan.
Work plan.
Quality control plan.
Environmental protection plan.

1.3.1 Approving Authority

Person authorized to approve submittal.

1.3.2 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.4 SUBMITTALS

Submit the following in accordance with the requirements of this section.

SD-01 Preconstruction Submittals

Submittal register; G

1.5 USE OF SUBMITTAL REGISTER DATABASE

Prepare and maintain submittal register, as the work progresses. Use electronic submittal register program furnished by the Government or any other format. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by government; retain data which is output in columns (a), (g), (h), and (i) as approved.

1.5.1 Submittal Register

Submit submittal register as an electronic database, using submittals management program furnished to contractor. Submit with quality control plan and project schedule required by SECTION 01320, Project Schedule. Do not change data in columns (c), (d), (e), and (f) as delivered by the government. Verify that all submittals required for project are listed and add missing submittals. Complete the following on the register database:

Column (a) Activity Number: Activity number from the project schedule.

Column (g) Contractor Submit Date: Scheduled date for approving authority to receive submittals.

Column (h) Contractor Approval Date: Date contractor needs approval of submittal.

Column (i) Contractor Material: Date that contractor needs material delivered to contractor control.

1.5.2 Contractor Use of Submittal Register

Update the following fields in the government-furnished submittal register program or equivalent fields in program utilized by contractor.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (j) Action Code (k): Date of action used to record contractor's review when forwarding submittals to QC.

Column (l) List date of submittal transmission.

Column (q) List date approval received.

1.5.3 Approving Authority Use of Submittal Register

Update the following fields in the government-furnished submittal register program or equivalent fields in program utilized by contractor.

Column (b).

Column (l) List date of submittal receipt.

Column (m) through (p).

Column (q) List date returned to contractor.

1.5.4 Contractor Action Code and Action Code

Entries used will be as follows (others may be prescribed by Transmittal Form):

NR - Not Received

AN - Approved as noted

A - Approved

RR - Disapproved, Revise, and Resubmit

1.5.5 Copies Delivered to the Government

Deliver one copy of submitted register updated by contractor to government with each invoice request. Deliver in electronic format, unless a paper copy is requested by contracting officer.

1.6 PROCEDURES FOR SUBMITTALS

1.6.1 Reviewing, Certifying, Approving Authority

QC organization shall be responsible for reviewing and certifying that submittals are in compliance with contract requirements. Approving authority on submittals is QC manager unless otherwise specified for specific submittal. At each "Submittal" paragraph in individual specification sections, a notation "G," following a submittal item, indicates contracting officer is approving authority for that submittal item.

1.6.2 Constraints

- a. Submittals listed or specified in this contract shall conform to provisions of this section, unless explicitly stated otherwise.
- b. Submittals shall be complete for each definable feature of work; components of definable feature interrelated as a system shall be submitted at same time.
- c. When acceptability of a submittal is dependent on conditions, items, or materials included in separate subsequent submittals, submittal will be returned without review.
- d. Approval of a separate material, product, or component does not imply approval of assembly in which item functions.

1.6.3 Scheduling

- a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential requirements to resubmit.
- b. Except as specified otherwise, allow review period, beginning with receipt by approving authority, that includes at least 15 working days for submittals for QC Manager approval and 20 working days for submittals for contracting officer approval. Period of

review for submittals with contracting officer approval begins when Government receives submittal from QC organization. Period of review for each resubmittal is the same as for initial submittal.

c. For submittals requiring review by fire protection engineer, allow review period, beginning when government receives submittal from QC organization, of 30 working days for return of submittal to the contractor. Period of review for each resubmittal is the same as for initial submittal.

1.6.4 Variations

Variations from contract requirements require Government approval pursuant to contract Clause entitled "FAR 52.236-21, Specifications and Drawings for Construction" and will be considered where advantageous to government.

1.6.4.1 Considering Variations

Discussion with contracting officer prior to submission, will help ensure functional and quality requirements are met and minimize rejections and resubmittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

1.6.4.2 Proposing Variations

When proposing variation, deliver written request to the contracting officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to government. If lower cost is a benefit, also include an estimate of the cost saving. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

1.6.4.3 Warranting That Variations Are Compatible

When delivering a variation for approval, contractor warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.6.4.4 Review Schedule Is Modified

In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Government of submittals with variations.

1.6.5 Contractor's Responsibilities

a. Determine and verify field measurements, materials, field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and contract documents.

b. Transmit submittals to QC organization in accordance with schedule on approved Submittal Register, and to prevent delays in the work, delays to government, or delays to separate contractors.

c. Advise contracting officer of variation, as required by

paragraph entitled "Variations."

d. Correct and resubmit submittal as directed by approving authority. When resubmitting disapproved transmittals or transmittals noted for resubmittal, the contractor shall provide copy of that previously submitted transmittal including all reviewer comments for use by approving authority. Direct specific attention in writing or on resubmitted submittal, to revisions not requested by approving authority on previous submissions.

e. Furnish additional copies of submittal when requested by contracting officer, to a limit of 20 copies per submittal.

f. Complete work which must be accomplished as basis of a submittal in time to allow submittal to occur as scheduled.

g. Ensure no work has begun until submittals for that work have been returned as "approved," or "approved as noted", except to the extent that a portion of work must be accomplished as basis of submittal.

1.6.6 QC Organization Responsibilities

a. Note date on which submittal was received from contractor on each submittal.

b. Review each submittal; and check and coordinate each submittal with requirements of work and contract documents.

c. Review submittals for conformance with project design concepts and compliance with contract documents.

d. Act on submittals, determining appropriate action based on QC organization's review of submittal.

1. When QC manager is approving authority, take appropriate action on submittal from the possible actions defined in paragraph entitled, "Actions Possible."

2. When contracting officer is approving authority or when variation has been proposed, forward submittal to Government with certifying statement or return submittal marked "not reviewed" or "revise and resubmit" as appropriate. The QC organization's review of submittal determines appropriate action.

e. Ensure that material is clearly legible.

f. Stamp each sheet of each submittal with QC certifying statement or approving statement, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only.

1. When approving authority is contracting officer, QC organization will certify submittals forwarded to contracting officer with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number _____, is in compliance with

the contract drawings and specification, can be installed in the allocated spaces, and is submitted for Government approval.

Certified by Submittal Reviewer _____, Date

(Signature when applicable)

Certified by QC Manager _____, Date

"

(Signature)

2. When approving authority is QC Manager, QC Manager will use the following approval statement when returning submittals to contractor as "Approved" or "Approved as Noted."

"I hereby certify that the (material) (equipment) (article) shown and marked in this submittal and proposed to be incorporated with contract Number _____, is in compliance with the contract drawings and specification, can be installed in the allocated spaces, and is _____ approved for use.

Certified by Submittal Reviewer _____, Date

(Signature when applicable)

Approved by QC Manager _____, Date

"

(Signature)

g. Sign certifying statement or approval statement. The person signing certifying statements shall be QC organization member designated in the approved QC plan. The signatures shall be in original ink. Stamped signatures are not acceptable.

h. Update submittal register as submittal actions occur and maintain the submittal register at project site until final acceptance of all work by contracting officer.

i. Retain a copy of approved submittals at project site, including contractor's copy of approved samples.

1.6.7 Government's Responsibilities

When approving authority is Contracting Officer, the Government will:

a. Note date on which submittal was received from QC manager, on each submittal for which the contracting officer is approving authority.

b. Review submittals for approval within scheduling period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph entitled "Actions Possible" and with markings appropriate for action indicated.

1.6.8 Actions Possible

Submittals will be returned with one of the following notations:

a. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by contractor or for being incomplete, with appropriate action, coordination, or change.

b. Submittals marked "approved" or "approved as submitted" authorize the contractor to proceed with work covered.

c. Submittals marked "approved as noted" or "approval except as noted; resubmission not required" authorize contractor to proceed with work as noted provided contractor takes no exception to the notations.

d. Submittals marked "revise and resubmit" or "disapproved" indicate submittal is incomplete or does not comply with design concept or requirements of the contract documents and shall be resubmitted with appropriate changes. No work shall proceed for this item until resubmittal is approved.

1.7 FORMAT OF SUBMITTALS

1.7.1 Transmittal Form

Transmit each submittal, except sample installations and sample panels, to office of approving authority. Transmit submittals with transmittal form prescribed by Contracting Officer and standard for project. The transmittal form shall identify Contractor, indicate date of submittal, and include information prescribed by transmittal form and required in paragraph Identifying Submittals. Process transmittal forms to record actions regarding sample panels and sample installations.

1.7.2 Identifying Submittals

Identify submittals, except sample panel and sample installation, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:

- a. Project title and location.
- b. Construction contract number.
- c. Section number of the specification section by which submittal is required.
- d. Submittal description (SD) number of each component of submittal.
- e. When a resubmission, add alphabetic suffix on submittal description, for example, SD-10A, to indicate resubmission.
- f. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other second tier contractor associated with submittal.

g. Product identification and location in project.

1.7.3 Format for Shop Drawings

a. Shop drawings shall not be less than A4 (297 by 210 mm) nor more than AO (1189 by 841 mm).

b. Present A4 (297 by 210 mm) sized shop drawings as part of the bound volume for submittals required by section. Present larger drawings in sets.

c. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph entitled "Identifying Submittals."

d. Dimension drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Shop drawing dimensions shall be the same unit of measure as indicated on the contract drawings. Identify materials and products for work shown.

1.7.4 Format of Product Data

- a. . Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.
- b. Indicate, by prominent notation, each product which is being submitted; indicate specification section number and paragraph number to which it pertains.
- c. Supplement product data with material prepared for project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project.
- d. Provide product data in metric dimensions. Where product data are included in preprinted catalogs with English units only, submit metric dimensions on separate sheet.

1.7.5 Format of Samples

a. Furnish samples in sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately same size as specified:

1. Sample of Equipment or Device: Full size.
2. Sample of Materials Less Than 50 by 75 mm: Built up to A4 (297 by 210 mm).
3. Sample of Materials Exceeding A4 (297 by 210 mm): Cut down to A4 (297 by 210 mm) and adequate to indicate color, texture, and material variations.
4. Sample of Linear Devices or Materials: 250 mm length or length to be supplied, if less than 250 mm. Examples of linear devices or materials are conduit and handrails.
- 5 Sample of Non-Solid Materials: 750 ml. Examples of non-solid

materials are sand and paint.

6. Color Selection Samples: 50 by 100 mm.

7. Sample Panel: 1200 by 1200 mm.

8. Sample Installation: 10 square meters.

b. Samples Showing Range of Variation: Where variations are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range.

c. Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples shall be in undamaged condition at time of use.

d. Recording of Sample Installation: Note and preserve the notation of area constituting sample installation but remove notation at final clean up of project.

e. When color, texture or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

1.7.6 Format of Operation and Maintenance (O&M) Data

O&M Data format shall comply with the requirements specified in SECTION 01010 DESIGN REQUIREMENTS.

1.7.7 Format of Administrative Submittals

a. When submittal includes a document which is to be used in project or become part of project record, other than as a submittal, do not apply contractor's approval stamp to document, but to a separate sheet accompanying document.

b. Provide all dimensions in administrative submittals in metric. Where data are included in preprinted material with English units only, submit metric dimensions on separate sheet.

1.8 QUANTITY OF SUBMITTALS

1.8.1 Number of Copies of Shop Drawings

Submit six copies of submittals of shop drawings requiring review and approval only by QC organization and seven copies of shop drawings requiring review and approval by Contracting Officer.

1.8.2 Number of Copies of Product Data

Submit product data in compliance with quantity requirements specified for shop drawings.

1.8.3 Number of Samples

a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by approving authority and one will be returned to contractor.

- b. Submit one sample panel. Include components listed in technical section or as directed.
- c. Submit one sample installation, where directed.
- d. Submit one sample of non-solid materials.

1.8.4 Number of Copies of Operation and Maintenance Data

Submit Five copies of O&M Data to the Contracting Officer for review and approval

1.8.5 Number of Copies of Administrative Submittals

Unless otherwise specified, submit administrative submittals compliance with quantity requirements specified for shop drawings.

1.9 FORWARDING SUBMITTALS

1.9.1 Submittals Required from the Contractor

As soon as practicable after award of contract, and before procurement of fabrication, forward to the Architect-Engineer: submittals required in the technical sections of this specification, including shop drawings, product data and samples. One copy of the transmittal form for all submittals shall be forwarded to the Resident Officer in Charge of Construction.

The Architect-Engineer for this project will review and provide surveillance for the Contracting Officer to verify Contractor-approved submittals comply with the contract requirements.

The Architect-Engineer for this project will review and approve for the Contracting Officer those submittals reserved for Contracting Officer approval to verify submittals comply with the contract requirements.

1.9.1.1 O&M Data

The Architect-Engineer for this project will review and approve for the Contracting Officer O&M Data to verify the submittals comply with the contract requirements; submit data specified for a given item within 30 calendar days after the item is delivered to the contract site.

In the event the Contractor fails to deliver O&M Data within the time limits specified, the Contracting Officer may withhold from progress payments 50 percent of the price of the item with which such O&M Data are applicable.

1.10 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.10.1 Designer of Record Approved

Designer of Record approval is required for extensions of design, critical materials, any deviations from the solicitation, the accepted proposal, or the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the

Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "shop drawings". The Contractor shall provide the Government the number of copies designated hereinafter of all Designer of Record approved submittals. The Government may review any or all Designer of Record approved submittals for conformance to the Solicitation and Accepted Proposal. The Government will review all submittals designated as deviating from the Solicitation or Accepted Proposal, as described below. Design submittals shall be in accordance with SECTION 01012 DESIGN AFTER AWARD. Generally, design submittals should be identified as SD-05 DESIGN DATA submittals.

1.10.2 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Government approval is required for any deviations from the Solicitation or Accepted Proposal and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.10.3 Government Reviewed Design or Extension of Design

The Government will review all design submittals for conformance with the technical requirements of the solicitation. SECTION 01012 DESIGN AFTER AWARD covers the design submittal and review process in detail. Government review is required for extension of design construction submittals, used to define contract conformity, and for deviation from the completed design. Review will be only for conformance with the contract requirements. Included are only those construction submittals for which the Designer of Record design documents do not include enough detail to ascertain contract compliance. The Government may, but is not required, to review extensions of design such as structural steel or reinforcement shop drawings.

1.10.4 Information Only

All submittals not requiring Government approval will be for information only. All submittals not requiring Designer of Record or Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.11 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory design, general method of construction, materials, detailing and other information appear to meet the Solicitation and Accepted Proposal. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is

responsible for design, dimensions, all design extensions, such as the design of adequate connections and details, etc., and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.12 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. The Contractor shall make all corrections required by the Contracting Officer, obtain the Designer of Record's approval when applicable, and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. Any "information only" submittal found to contain errors or unapproved deviations from the Solicitation or Accepted Proposal shall be resubmitted as one requiring "approval" action, requiring both Designer of Record and Government approval. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.13 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. No payment for materials incorporated in the work will be made if all required Designer of Record or required Government approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

1.14 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager Quality Control (CQC) System Manager and the Designer of Record, if applicable, and each item shall be stamped, signed, and dated by the CQC System Manager and designer of record indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.15 SUBMITTAL REGISTER

At the end of this section is a submittal register list showing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor shall maintain a submittal register for the project in accordance with SECTION 01312 QUALITY CONTROL SYSTEM (QCS).

The Designer of Record shall develop a complete list of submittals during design. The Designer of Record shall identify required submittals in the specifications, and use the list to prepare the Submittal Register. The list may not be all inclusive and additional submittals may be required by other parts of the contract. The Contractor is required to complete the submittal register and submit it to the Contracting Officer for approval within 30 calendar days after completion of 95% design. The approved submittal register will serve as a scheduling document for submittals and will be used to control submittal actions throughout the contract period. The submit dates and need dates used in the submittal register shall be coordinated with dates in the Contractor prepared progress schedule. Updates to the submittal register showing the Contractor action codes and actual dates with Government action codes and actual dates shall be submitted monthly or until all submittals have been satisfactorily completed. When the progress schedule is revised, the submittal register shall also be revised and both submitted for approval.

1.16 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

1.17 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

1.18 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

1.18.1 Procedures

The Government will further discuss detailed submittal procedures with the Contractor at the Preconstruction Conference.

1.18.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.19 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.20 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Two copies of the submittal will be retained by the Contracting Officer and one copy of the submittal will be returned to the Contractor. If the Government performs a conformance review of other Designer of Record approved submittals, the submittals will be so identified and returned, as described above.

1.21 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe. For design-build construction the Government will retain two copies of information only submittals.

1.22 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

	CONTRACTOR
	(Firm Name)
	_____ Approved
	_____ Approved with corrections as noted on submittal data and/or
	attached sheets(s).
	SIGNATURE: _____
	TITLE: _____
	DATE: _____

For design-build construction, both the Contractor Quality Control System Manager and the Designer of Record shall stamp and sign to certify that the submittal meets contract requirements.

1.23 ATTACHMENTS

SUBMITTAL REGISTERS
ENG FORM 4025

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

CONTRACT NO.

SUBMITTAL FORM, Jan. 96
PREVIOUS EDITION IS OBSOLETE
PAGE 1 OF 1 PAGES

SECTION 01330 PAGE 22

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A	--	Approved as submitted.	E	--	Disapproved (See attached).
B	--	Approved, except as noted on drawings.	F	--	Receipt acknowledged.
C	--	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX	--	Receipt acknowledged, does not comply as noted with contract requirements.
D	--	Will be returned by separate correspondence.	G	--	Other (Specify)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

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SECTION 01355

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual
WETLAND MANUAL	Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment

aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Installation Pest Management Coordinator

Installation Pest Management Coordinator (IPMC) is the individual officially designated by the Installation Commander to oversee the Installation Pest Management Program and the Installation Pest Management Plan.

1.2.4 Project Pesticide Coordinator

The Project Pesticide Coordinator (PPC) is an individual that resides at a Civil Works Project office and that is responsible for oversight of pesticide application on Project grounds.

1.2.5 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application shall be in compliance with all applicable Federal, State, and local laws and regulations.

1.2.6 Pesticide

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

1.2.7 Pests

The term "pests" means arthropods, birds, rodents, nematodes, fungi,

bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.8 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.2.9 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.10 Wetlands

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLAND MANUAL.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SECTION 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G.

1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan shall include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan.
- f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.
- g. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.
- h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
- i. Drawing showing the location of borrow areas.
- j. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:
 - 1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer and CESCEVQ at 377-7745. During off-duty hours for CESCEVQ, the notification shall be immediately provided to the Eielson AFP Fire Dept. The plan shall contain a list of the required reporting channels and telephone numbers.
 - 2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
 - 3. Training requirements for Contractor's personnel and methods of accomplishing the training.

4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
 5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
 6. The methods and procedures to be used for expeditious contaminant cleanup.
- k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October). The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic meters or tons along with the percent that was diverted.
- l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.
- m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.
- n. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated. An inventory and sketch of hazardous materials and storage location shall be updated at least monthly.
- o. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are

directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan shall include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan shall include a sketch showing the location for land application along with a description of the pretreatment methods to be implemented. If surface discharge will be the method of disposal, a copy of the permit and associated documents shall be included as an attachment prior to discharging the waste water. If disposal is to a sanitary sewer, the plan shall include documentation that the Waste Water Treatment Plant Operator has approved the flow rate, volume, and type of discharge.

1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached, as an appendix, to the Environmental Protection Plan.

1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

1.9 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements of the attached Waste Disposal/Borrow Pit Coordination Review.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will

have an adverse environmental impact.

1.11 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs). BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins.

3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

3.3.1 Cofferdams, Diversions, and Dewatering Operations

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to maintain compliance with existing State water quality standards and designated uses of the surface water body. The Contractor shall comply with the State of Alaska water quality standards and anti-degradation provisions.

3.3.2 Stream Crossings

Stream crossings shall allow movement of materials or equipment without violating water pollution control standards of the Federal, State, and local governments.

3.3.3 Wetlands

The Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands except as authorized herein. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

3.4 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

3.4.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

3.4.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

3.4.4 Burning

Burning shall be prohibited on the Government premises.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Asbestos containing material that is segregated from other debris will be accepted at the asbestos cell of the Eielson AFB Landfill.

3.5.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 150 mm of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262, and the Eielson AFB Hazardous Waste Management Plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer and the Facility Environmental Office (CESCEVQ) or Fire Department. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site.

3.5.5 Waste Water

Disposal of waste water shall be as specified below.

- a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.
- b. For discharge of ground water, the Contractor shall obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharging.
- c. Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing discharged into the sanitary sewer with prior approval and/or notification to the Waste Water Treatment Plant's Operator.

3.6 RECYCLING AND WASTE MINIMIZATION

The Contractor is encouraged to minimize solid waste generation throughout the duration of the project. The Contractor shall complete and submit the Eielson AFB Waste Disposal/Borrow Pit Plan in accordance with Air Force requirements.

3.7 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

3.8 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA

jurisdictional office for additional cleaning requirements.

3.9 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.10 MILITARY MUNITIONS

In the event the Contractor discovers or uncovers military munitions as defined in 40 CFR 260, the Contractor shall immediately stop work in that area and immediately inform the Contracting Officer.

3.11 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

3.12 CONTAMINATED MEDIA MANAGEMENT

Contaminated environmental media consisting of, but not limited to, ground water, soils, and sediments shall be managed in accordance with all state and federal regulations.

3.13 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01415

METRIC MEASUREMENTS

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SECTION 01415

METRIC MEASUREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 380	(1993) Practice for Use of the International System of Units (SI)
ASTM E 621	(1994; R 1999e1) Practice for Use of Metric (SI) Units in Building Design and Construction

1.2 GENERAL

This project includes metric units of measurements. The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960. A number of circumstances require that both metric SI units and English inch-pound (I-P) units be included in a section of the specifications. When both metric and I-P measurements are included, the section may contain measurements for products that are manufactured to I-P dimensions and then expressed in mathematically converted metric value (soft metric) or, it may contain measurements for products that are manufactured to an industry recognized rounded metric (hard metric) dimensions but are allowed to be substituted by I-P products to comply with the law. Dual measurements are also included to indicate industry and/or Government standards, test values or other controlling factors, such as the code requirements where I-P values are needed for clarity or to trace back to the referenced standards, test values or codes.

1.3 USE OF MEASUREMENTS

Measurements shall be either in SI or I-P units as indicated, except for soft metric measurements or as otherwise authorized. When only SI or I-P measurements are specified for a product, the product shall be procured in the specified units (SI or I-P) unless otherwise authorized by the Contracting Officer. The Contractor shall be responsible for all associated labor and materials when authorized to substitute one system of units for another and for the final assembly and performance of the specified work and/or products.

1.3.1 Hard Metric

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value. Hard metric measurements are often used for field data such as distance from one point to another or distance above the floor. Products are considered to be hard metric when they are manufactured to metric dimensions or have an industry recognized metric designation.

1.3.2 Soft Metric

a. A soft metric measurement is indicated by an SI value which is a mathematical conversion of the I-P value shown in parentheses (e.g. 38.1 mm (1-1/2 inches)). Soft metric measurements are used for measurements pertaining to products, test values, and other situations where the I-P units are the standard for manufacture, verification, or other controlling factor. The I-P value shall govern while the metric measurement is provided for information.

b. A soft metric measurement is also indicated for products that are manufactured in industry designated metric dimensions but are required by law to allow substitute I-P products. These measurements are indicated by a manufacturing hard metric product dimension followed by the substitute I-P equivalent value in parentheses (e.g., 190 x 190 x 390 mm (7-5/8 x 7-5/8 x 15-5/8 inches)).

1.3.3 Neutral

A neutral measurement is indicated by an identifier which has no expressed relation to either an SI or an I-P value (e.g., American Wire Gage (AWG) which indicates thickness but in itself is neither SI nor I-P).

1.4 COORDINATION

Discrepancies, such as mismatches or product unavailability, arising from use of both metric and non-metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be brought to the attention of the Contracting Officer for resolution.

1.5 RELATIONSHIP TO SUBMITTALS

Submittals for Government approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

1.2 ORDERING INFORMATION

-- End of Section Table of Contents --

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
Internet: www.astm.org
AOK 5/01
LOK 3/01

STATE OF ALASKA ADMINISTRATIVE CODE (AAC)

Touch N' Go Systems Inc.
406 G Street, Suite 210
Anchorage AK 99501
Ph: 907-264-6333
Fax: 907-274-9493
Internet: <http://touchngo.com//lglcntr>

ASTM INTERNATIONAL (ASTM)

100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959
Ph: 610-832-9500
Fax: 610-832-9555
Internet: <http://www.astm.org>

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

1 Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101
Ph: 617-770-3000
Fax: 617-770-0700
Internet: <http://www.nfpa.org>

U.S. AIR FORCE (USAF)

Air Force Publishing Distribution Center
Ph: 410-687-3330
E-mail: afpdc-service@pentagon.af.mil
Internet: <http://www.e-publishing.af.mil/>

U.S. ARMY CORPS OF ENGINEERS (USACE)

Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services
Branch, TIC
3909 Halls Ferry Rd.
Vicksburg, MS 39180-6199
Ph: 601-634-2664
Fax: 601-634-2388
Internet: <http://www.wes.army.mil/SL/MTC/handbook/handbook.htm>

Order Other Documents from:
USACE Publications Depot
Attn: CEIM-SP-D
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
Fax: 301-394-0084
Internet: <http://www.usace.army.mil/publications>
or <http://www.hnd.usace.army.mil/techinfo/index.htm>

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

General Services Administration
1800 F Street, NW
Washington, DC 20405
PH: 202-501-0705

Order from:
General Services Administration
Federal Supply Service Bureau
1941 Jefferson Davis Highway
Arlington, VA 22202
PH: 703-605-5400
Internet: <http://www.fss.gsa.gov/pub/fed-specs.cfm>

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

700 Pennsylvania Avenue, N.W.
Washington, D.C. 20408
Phone: 866-325-7208
Internet: <http://www.archives.gov>

Order documents from:
Superintendent of Documents
U.S. Government Printing Office
732 North Capitol Street, NW
Washington, DC 20401
Mailstop: SDE
Ph: 866-512-1800 or 202-512-1800
Fax: 202-512-2250
Internet: <http://www.gpo.gov>
E-mail: gpoaccess@gpo.gov

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SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 3740	(2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
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ASTM E 329	(2000b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
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1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all design and construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise

acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction Design and construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all design and construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents subcontractors, designers of record, consultants, architect/engineers (AE), fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent and project manager.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents subcontractors, designers of record, consultants, architect engineers (AE), offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with SECTION 01330 SUBMITTAL PROCEDURES.
- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph

requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities approved by the Contracting Officer shall be used.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking design and construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 Additional Requirements for Design Quality Control (DQC) Plan

The following additional requirements apply to the Design Quality Control (DQC) plan:

a. The Contractor's QCP Plan shall provide and maintain a Design Quality Control (DQC) Plan as an effective quality control program which will assure that all services required by this design-build contract are performed and provided in a manner that meets professional architectural and engineering quality standards. As a minimum, all documents shall be technically reviewed by competent, independent reviewers identified in the DQC Plan. The same element that produced the product shall not perform the independent technical review (ITR). The Contractor shall correct errors and deficiencies in the design documents prior to submitting them to the Government.

b. The Contractor shall include the design schedule in the master project schedule, showing the sequence of events involved in carrying out the project design tasks within the specific contract period. This should be at a detailed level of scheduling sufficient to identify all major design tasks, including those that control the flow of work. The schedule shall include review and correction periods associated with each item. This should be a forward planning as well as a project monitoring tool. The schedule reflects calendar days and not dates for each activity. If the schedule is changed, the Contractor shall submit a revised schedule reflecting the change within 7 calendar days. The Contractor shall include in the DQC Plan the discipline-specific checklists to be used during the design and quality control of each submittal. These completed checklists shall be submitted at each design phase as part of the project documentation.

c. The DQC Plan shall be implemented by an Design Quality Control Manager who has the responsibility of being cognizant of and assuring that all documents on the project have been coordinated. This individual shall be a person who has verifiable engineering or architectural design experience and is a registered professional engineer or architect. The Contractor shall notify the Contracting Officer, in writing, of the name of the individual, and the name of an alternate person assigned to the position.

The Contracting Officer will notify the Contractor in writing of the acceptance of the DQC Plan. After acceptance, any changes proposed by the Contractor are subject to the acceptance of the Contracting Officer.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of design and construction. Acceptance is conditional and will be predicated on satisfactory performance during the design and construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, Postaward Conference, before start of design or construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 30 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, design activities, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager, a

Design Quality Manager, and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of 7 years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: These individuals be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals shall have no other duties other than quality control. May perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.

Experience Matrix

	Area	Qualifications
a.	Civil	Graduate Civil Engineer with 2 years experience in the type of work being performed

Experience Matrix

	Area	Qualifications
		on this project or technician with 5 yrs related experience
b.	Mechanical	Graduate Mechanical Engineer with 2 yrs experience or person with 5 yrs related experience
c.	Electrical	Graduate Electrical Engineer with 2 yrs related experience or person with 5 yrs related experience
d.	Structural	Graduate Structural Engineer with 2 yrs experience or person with 5 yrs related experience
e.	Architectural	Graduate Architect with 2 yrs experience or person with 5 yrs related experience
f.	Environmental	Graduate Environmental Engineer with 3 yrs experience
g.	Submittals	Submittal Clerk with 1 yr experience
h.	Occupied family housing	Person, customer relations type, coordinator experience
i.	Concrete, Pavements and Soils	Materials Technician with 2 yrs experience for the appropriate area

3.4.4 Additional Requirement

In addition to the above experience and/or education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered at the Associated General Contractors of Alaska office in Anchorage and Fairbanks.

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the

Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in SECTION 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to

the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Each test shall give the test name, specification section and paragraph reference requiring the test, frequency, the personnel and/or laboratories responsible for each type of test, with an estimated number of tests required. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed actual costs to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to a laboratory to be designated by the Contracting Officer.

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.12 ATTACHMENTS

CQC Report

CONTRACTOR'S QUALITY CONTROL REPORT (CQC) (ER 1180-1-6)		DATE	REPORT NO.
CONTRACT NO. AND NAME OF CONTRACTOR:		DESCRIPTION AND LOCATION OF THE WORK:	
WEATHER CLASSIFICATION: CLASS A No interruption of any kind from weather conditions occurring on this or previous shifts. CLASS B Weather occurred during this shift that caused a complete stoppage of all work. CLASS C Weather occurred during this shift that caused a partial stoppage of work. CLASS D Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather. CLASS E Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner. OTHER Explain.		CLASSIFICATION: CLASS _____	TEMPERATURE: MAX ____ MIN ____
		PRECIPITATION: INCHES _____	
CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY: (Attach list of items of equipment either idle or working as appropriate.) a. _____ b. _____ c. _____ d. _____ e. _____ f. _____			
1. WORK PERFORMED TODAY: (Indicate location and description of work performed. Refer to work performed by prime and/or subcontractors by letter in Table above.) 			
2. TYPE AND RESULTS OF INSPECTION: (Indicate whether P-Preparatory, I-Initial, or F-Followup and include satisfactory work completed or deficiencies with action to be taken.) 			
3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS: 			

4. VERBAL INSTRUCTIONS RECEIVED: (List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.)

5. REMARKS: (Cover any conflicts in plans, specifications or instructions: acceptability of incoming materials; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same.)

6. SAFETY: (Include any infractions of approved safety plan, safety manual, or instructions from Government personnel. Specify corrective action taken).

CONTRACTOR: _____

CONTRACTOR'S CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in strict compliance with the contract plans and specifications except as noted above.

CONTRACTOR'S APPROVED AUTHORIZED REPRESENTATIVE

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SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

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PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

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SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

1.1.1 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.1.2 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the military installation.

1.2 AVAILABILITY AND USE OF UTILITY SERVICES

1.2.1 Payment for Utility Services

The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

1.2.2 Meters and Temporary Connections

The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meters required to measure the amount of each utility used for the purpose of determining charges. The Contractor shall notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that a utilities contract can be established.

1.2.1.1 Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of \$50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

1.2.4 Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, the Contractor shall notify the Contracting Officer, in writing, 5 working days before termination is desired. The Government will take a final meter reading. The Contractor shall then remove all the temporary distribution lines, meter(s), and associated paraphernalia. The Contractor shall pay all outstanding utility bills before final acceptance of the work by the Government.

1.2.2 Sanitation

The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer. Government toilet facilities will not be available to Contractor's personnel.

1.2.3 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired.

1.3 BULLETIN BOARD

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 914 by 1219 mm in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work, the bulletin board shall be removed by

and remain the property of the Contractor.

1.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.4.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

1.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, and clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.5 CONTRACTOR'S TEMPORARY FACILITIES

1.5.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.5.2 Storage Area

The Contractor shall construct a temporary 1.8 m high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored green brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. Mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area at the end of each work day.

1.5.3 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but shall be within the military boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

1.5.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the military property.

1.5.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.5.6 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's

temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

1.6 GOVERNMENT FIELD OFFICE

1.6.1 Resident Engineer's Office

The Contractor shall provide the Government Resident Engineer with an office, approximately 19 square meters in floor area, located where directed and providing space heat, electric light and power, and toilet facilities consisting of one lavatory and one water closet complete with connections to water and sewer mains. A mail slot in the door or a lockable mail box mounted on the surface of the door shall be provided. At completion of the project, the office shall remain the property of the Contractor and shall be removed from the site. Utilities shall be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer. See SECTION 01015 SPECIAL ITEMS for furnishings.

1.6.2 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

1.7 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.8 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 1.1 m high, supported and tightly secured to steel posts located on maximum 3 m centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.9 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto

paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.10 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

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SECTION 01582

AIR FORCE PROJECT SIGN

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- 1.4 ATTACHMENT

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

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SECTION 01582

AIR FORCE PROJECT SIGN

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FED-STD-595

(1989 Rev B, Notice 1) Color

1.2 PROJECT SIGN

Immediately upon beginning work at project site, the Contractor shall furnish and erect a project sign in a location determined by the Contracting Officer. Details of construction shall be as shown on the attached drawings. The sign shall be constructed of 13 mm thick, Grade A-C, exterior-type plywood. The sign shall receive one coat of primer paint, FED-STD-595 color number 20109, semi-gloss, exterior-type enamel. The Air Force Engineering and services emblem decal will be furnished to the Contractor by the Government, for applying where indicated. Upon completion of work on the project, the sign shall be removed from the job site and shall remain the property of the Contractor.

1.3 PAYMENT

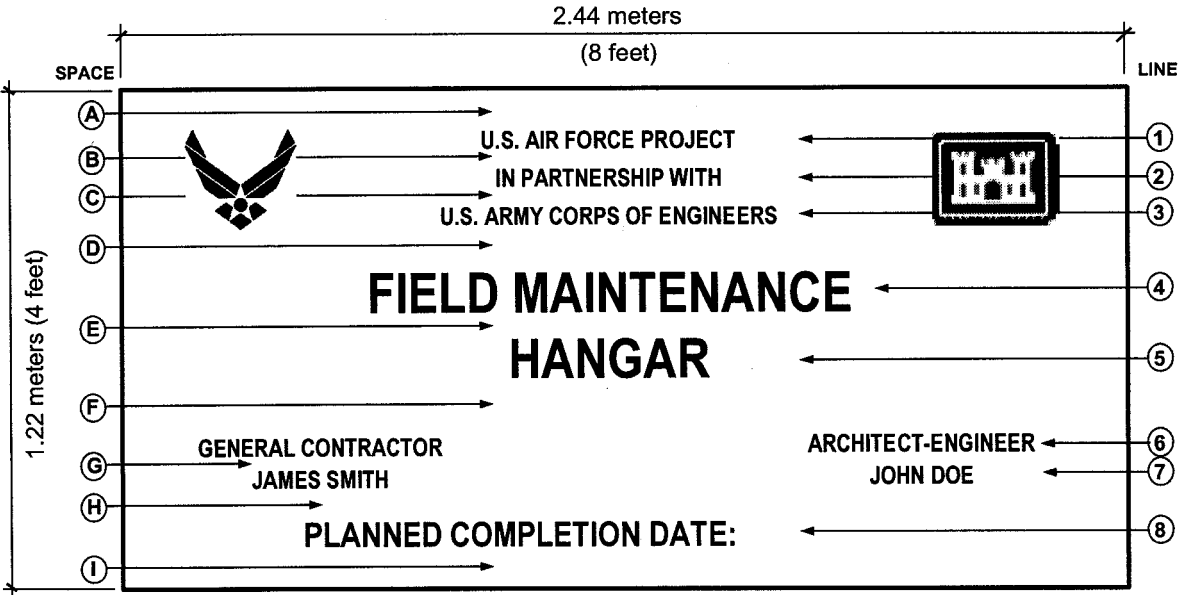
No separate payment will be made for the project sign. Costs shall be considered incidental to and included in the contract price.

1.4 ATTACHMENT

Air Force Sign

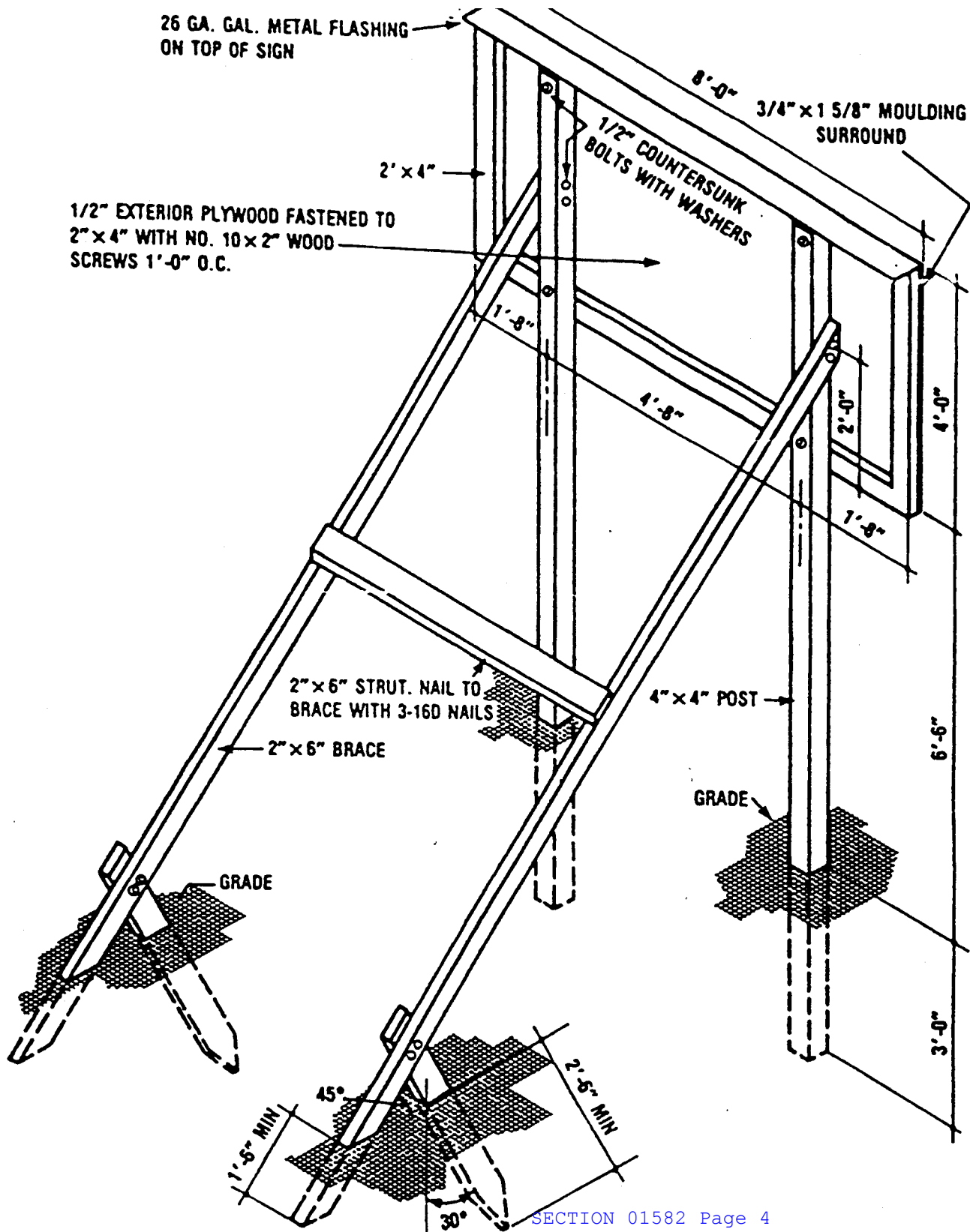
PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED



SAMPLE CONSTRUCTION SIGN FOR MILCON PROJECTS

Space	Height	Line	Description	Letter Height	Stroke
A	102 mm (4 in)	1	U.S. AIR FORCE PROJECT	38 mm (1.5 in)	5 mm (0.1875 in)
B	51 mm (2 in)	2	IN PARTNERSHIP WITH	38 mm (1.5 in)	5 mm (0.1875 in)
C	51 mm (2 in)	3	U.S. ARMY CORPS OF ENGINEERS	38 mm (1.5 in)	5 mm (0.1875 in)
D	127 mm (5 in)	4	PROJECT NAME	102 mm (4 in)	13 mm (0.5 in)
E	76 mm (3 in)	5	PROJECT NAME CONT'D (IF REQUIRED)	102 mm (4 in)	13 mm (0.5 in)
F	127 mm (5 in)	6	GENERAL CONTRACTOR/A-E	38 mm (1.5 in)	5 mm (0.1875 in)
G	25 mm (1 in)	7	GENERAL CONTRACTOR/A-E	38 mm (1.5 in)	5 mm (0.1875 in)
H	102 mm (4 in)	8	PLANNED COMPLETION DATE	63 mm (2.5 in)	6 mm (0.25 in)



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SECTION 01780

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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section Table of Contents --

SECTION 01780

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SECTION 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

As-Built Drawings; G.

Drawings showing final as-built conditions of the project. The final CADD as-built drawings shall consist of one set of electronic CADD drawing files in the specified format, one set of mylar drawings, 2 sets of blue-line prints of the mylars, and one set of the approved working as-built drawings, and one fully populated, fully functional SDS and A/E/C CADD Standard compliant database connected to CADD drawing features.

SD-03 Product Data

As-Built Record of Equipment and Materials.

Two copies of the record listing the as-built materials and equipment incorporated into the construction of the project.

Warranty Management Plan.

One set of the warranty management plan containing information relevant to the warranty of materials and equipment incorporated into the construction project, including the starting date of warranty of construction. The Contractor shall furnish with each warranty the name, address, and telephone number of each of the guarantor's representatives nearest to the project location.

Warranty Tags.

Two record copies of the warranty tags showing the layout and design.

Final Cleaning.

Two copies of the listing of completed final clean-up items.

1.2 PROJECT RECORD DOCUMENTS

1.2.1 As-Built Drawings

This paragraph covers as-built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings which are revised to be used for final as-built drawings. An SDS and A/E/C CADD compliant database will also be provided by the Government for population of feature attributes and metadata.

1.2.1.1 Government Furnished Materials

One set of electronic CADD files in the specified software and format revised to reflect all bid amendments will be provided by the Government at the preconstruction conference for projects requiring CADD file as-built drawings.

1.2.1.2 Working As-Built and Final As-Built Drawings

The Contractor shall revise 2 sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These working as-built marked drawings shall be kept current on a weekly basis and at least one set shall be available on the jobsite at all times. Changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. Final as-built drawings shall be prepared after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The working as-built marked prints and final as-built drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working and final as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. The working and final as-built drawings shall show, but shall not be limited to, the following information:

- a. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, the as-built drawings shall show, by offset dimensions to two permanently fixed surface features, the end of each run including each change in direction. Valves, splice boxes and similar appurtenances shall be located by dimensioning along the utility run from a reference point. The average depth below the surface of each run shall also be recorded.
- b. The location and dimensions of any changes within the building

structure.

c. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

d. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

e. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

f. Changes or modifications which result from the final inspection.

g. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.

h. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.

i. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

j. Modifications (change order price shall include the Contractor's cost to change working and final as-built drawings to reflect modifications) and compliance with the following procedures.

1. Directions in the modification for posting descriptive changes shall be followed.

2. A Modification Cloud shall be placed at the location of each deletion.

3. For new details or sections which are added to a drawing, a Modification Triangle shall be placed by the detail or section title.

4. For minor changes, a Modification Triangle shall be placed by the area changed on the drawing (each location).

5. For major changes to a drawing, a Modification Triangle shall be placed by the title of the affected plan, section, or detail at each location.

6. For changes to schedules or drawings, a Modification Triangle shall be placed either by the schedule heading or by the change in the schedule.

7. The Modification Triangle size shall be 13 mm diameter unless the area where the triangle is to be placed is crowded. Smaller size triangle shall be used for crowded areas.

1.2.1.3 Drawing Preparation

The as-built drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as-built prints, and adding such additional drawings as may be necessary. These working as-built marked prints shall be neat, legible and accurate. These drawings are part of the permanent records of this project and shall be returned to the Contracting Officer after approval by the Government. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at no expense to the Government.

1.2.1.4 Computer Aided Design and Drafting (CADD) Drawings

Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols shall be the same as the original line colors, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD files. The Contractor will be furnished "as-designed" drawings in AutoCad Release 2000. The electronic files will be supplied on compact disc, read-only memory (CD-ROM). The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings. The Contractor shall ensure that all digital files and data (e.g. model files, reference files, cell libraries) are compatible with the Government's target CADD system (i.e. basic and advanced CADD software, platform, database software), and adhere to the standards and requirements specified herein. The term "compatible" means that the data can be accessed directly by the target CADD system without translation, preprocessing, or postprocessing of electronic digital data files. It is the responsibility of the contractor to ensure this level of compatibility. The contractor shall also produce drawings and models, which are compatible with AutoDesk's Land Desktop version 2004 software. This includes full functionality of Land Desktop's associated database. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make required corrections, changes, additions, and deletions.

1. CADD Standards

CADD drawings shall be prepared in accordance with CADD/GIS Technology Center SDSFIE/FMSFIE Release 2.2 and the A/E/C CADD Standard Release 2.0. These standards can be found at the CADD/GIS Technology Center website:

<http://tsc.wes.army.mil/>

2. CADD colors shall be the "base" colors of red, green, and blue. Color code for changes shall be as follows:

- a. Deletions (red) - Deleted graphic items (lines) shall be colored red with red lettering in notes and leaders.
- b. Additions (Green) - Added items shall be drawn in green with green lettering in notes and leaders.
- c. Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes shall be in blue.

3. The Contract Drawing files shall be renamed in a manner related to the contract number (i.e., 02-C-0010.DWG) as instructed in the Pre-Construction conference. Marked-up changes shall be made only to those renamed files. All changes shall be made on the layer/level as the original item. There shall be no deletions of existing lines; existing lines shall be over struck in red. Additions shall be in green with line weights the same as the drawing. Special notes shall be in blue on layer #63.

b. Datums, Coordinate Systems and Units

1. All digital CADD drawings (i.e. .dwg files) shall be georeferenced correctly as follows:

Coordinate System: Universal Transverse Mercator (UTM)
Projection: Transverse Mercator
Zone: 6 North
Horizontal Datum: WGS 1984
Spheroid: WGS 1984
False Easting: 500000.000000
False Northing: 0.000000
Central Meridian: 147° West Longitude
Latitude of Origin: 0° Latitude
Scale Factor: 0.999600
Horizontal Datum: NAVD 1988
Linear Unit: 1 Meter

2. Primary units of measure for all CADD drawings will be in SI. For updates on DOD policy for metrification, refer to the Construction Metrification Council of the National Institute of Building Sciences at <http://www.nibs.org>.

c. CADD and GIS Integration Considerations

The following guidelines in data structure will be followed in order to facilitate the integration of CADD data resulting from this contract with existing GIS resources (i.e. GeoBase).

1. The edges of all digitized maps must exactly match digitally with those of adjacent maps.
2. The digital representation of the common boundaries for all graphic features must be exactly the same, regardless of level/layer. Each feature within a map theme must be represented by a single graphic element (e.g. polygon, line, or line string).
3. Lines and line strings with represent the same graphic element must be continuous (i.e. not broken or segmented), unless that segmentation reflects a specific visual line type (i.e. a dashed line font on a continuous line may be used). Lines/strings representing the same type of data must not cross except at intersections.
4. Polygons will represent area features. Polygons must be closed (i.e. the first x,y coordinate must exactly match the last x,y coordinate). Each polygon must have a single unique centroid to which attributes (i.e. an attribute table) can be attached. Polygons of the same coverage must not overlap and must cover the area of interest completely (i.e. have no gaps in coverage).
5. All graphic elements that connect must connect digitally exactly, without overlaps or gaps.
6. Straight lines must be represented by only the beginning and ending x,y coordinate points. Line strings must not cross back on themselves or be of zero length.

d. Geospatial Metadata

Metadata must be created for and accompany all CADD data. Metadata shall be in accordance with the Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata. These standards can be found at the Federal Geographic Data Committee website at:

<http://www.fgdc.gov/metadata/>

e. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm high. All other contract drawings shall be marked either "AS-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

f. Within 10 days after Government approval of all of the working as-built drawings for a phase of work, the Contractor shall prepare the final CADD as-built drawings for that phase of work and submit two sets of blue-lined prints of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 10 days the Contractor shall revise the CADD files accordingly at no additional

cost and submit one set of final prints for the completed phase of work to the Government. Within 20 days of substantial completion of all phases of work, the Contractor shall submit the final as-built drawing package for the entire project. The submittal shall consist of one set of electronic files on read-only memory (CD-ROM), one set of mylars, two sets of blue-line prints and one set of the approved working as-built drawings. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or adjustments necessary to accomplish this is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the customer's CADD system. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.2.1.5 Payment

No separate payment will be made for as-built drawings required under this contract, and all costs accrued in connection with such drawings shall be considered a subsidiary obligation of the Contractor.

1.2.2 As-Built Record of Equipment and Materials

The Contractor shall furnish one copy of preliminary record of equipment and materials used on the project 15 days prior to final inspection. This preliminary submittal will be reviewed and returned 2 days after final inspection with Government comments. Two sets of final record of equipment and materials shall be submitted 10 days after final inspection. The designations shall be keyed to the related area depicted on the contract drawings. The record shall list the following data:

RECORD OF DESIGNATED EQUIPMENT AND MATERIALS DATA

Description	Specification Section	Manufacturer and Catalog, Model, and Serial Number	Composition and Size	Where Used
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1.2.3 Final Approved Shop Drawings

The Contractor shall furnish final approved project shop drawings 30 days after transfer of the completed facility.

1.2.4 Construction Contract Specifications

The Contractor shall furnish final as-built construction contract specifications, including modifications thereto, 30 days after transfer of the completed facility.

1.2.5 Real Property Equipment

The Contractor shall furnish a list of installed equipment furnished under this contract. The list shall include all information usually listed on manufacturer's name plate. The "EQUIPMENT-IN-PLACE LIST" shall include, as applicable, the following for each piece of equipment installed: description of item, location (by room number), model number, serial number, capacity, name and address of manufacturer, name and address of equipment supplier, condition, spare parts list, manufacturer's catalog, and warranty. A draft list shall be furnished at time of transfer. The final list shall be furnished 30 days after transfer of the completed facility.

1.3 WARRANTY MANAGEMENT

1.3.1 Warranty Management Plan

The Contractor shall develop a warranty management plan which shall contain information relevant to the clause Warranty of Construction in SECTION 01015, SPECIAL ITEMS. At least 30 days before the planned pre-warranty conference, the Contractor shall submit the warranty management plan for Government approval. The warranty management plan shall include all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan shall be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below shall include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase shall be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Approved information shall be assembled in a binder and shall be turned over to the Government upon acceptance of the work. The construction warranty period shall begin on the date of project acceptance and shall continue for the full product warranty period. A joint 4 month and 9 month warranty inspection shall be conducted, measured from time of acceptance, by the Contractor, Contracting Officer and the Customer Representative. Information contained in the warranty management plan shall include, but shall not be limited to, the following:

- a. Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors, manufacturers or suppliers involved.
- b. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.
- c. A list for each warranted equipment, item, feature of construction or system indicating:
 1. Name of item.

2. Model and serial numbers.
 3. Location where installed.
 4. Name and phone numbers of manufacturers or suppliers.
 5. Names, addresses and telephone numbers of sources of spare parts.
 6. Warranties and terms of warranty. This shall include one-year overall warranty of construction. Items which have extended warranties shall be indicated with separate warranty expiration dates.
 7. Cross-reference to warranty certificates as applicable.
 8. Starting point and duration of warranty period.
 9. Summary of maintenance procedures required to continue the warranty in force.
 10. Cross-reference to specific pertinent Operation and Maintenance manuals.
 11. Organization, names and phone numbers of persons to call for warranty service.
 12. Typical response time and repair time expected for various warranted equipment.
- d. The Contractor's plans for attendance at the 4 and 9 month post-construction warranty inspections conducted by the Government.
- e. Procedure and status of tagging of all equipment covered by extended warranties.
- f. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.

1.3.2 Performance Bond

The Contractor's Performance Bond shall remain effective throughout the construction period.

- a. In the event the Contractor fails to commence and diligently pursue any construction warranty work required, the Contracting Officer will have the work performed by others, and after completion of the work, will charge the remaining construction warranty funds of expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.
- b. In the event sufficient funds are not available to cover the

construction warranty work performed by the Government at the Contractor's expense, the Contracting Officer will have the right to recoup expenses from the bonding company.

c. Following oral or written notification of required construction warranty repair work, the Contractor shall respond in a timely manner. Written verification will follow oral instructions. Failure of the Contractor to respond will be cause for the Contracting Officer to proceed against the Contractor.

1.3.3 Pre-Warranty Conference

Prior to contract completion, and at a time designated by the Contracting Officer, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty shall be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, the Contractor shall furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. This point of contact will be located within the local service area of the warranted construction, shall be continuously available, and shall be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

1.3.4 Contractor's Response to Construction Warranty Service Requirements

Following oral or written notification by the Contracting Officer, the Contractor shall respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. The Contractor shall submit a report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframes specified, the Government will perform the work and backcharge the construction warranty payment item established.

a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.

b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.

c. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.

d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Air Conditioning Systems

1. Recreational support.
2. Air conditioning leak in part of building, if causing damage.
3. Air conditioning system not cooling properly.

Code 1-Doors

1. Overhead doors not operational, causing a security, fire, or safety problem.
2. Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors

1. Overhead doors not operational.
2. Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical

1. Power failure (entire area or any building operational after 1600 hours).
2. Security lights
3. Smoke detectors

Code 2-Electrical

1. Power failure (no power to a room or part of building).
2. Receptacle and lights (in a room or part of building).

Code 3-Electrical

Street lights.

Code 1-Gas

Leaks and breaks.

Code 1-Heat

- 1.. Area power failure affecting heat.
2. Heater in unit not working.

Code 2-Kitchen Equipment

1. Dishwasher not operating properly.
2. All other equipment hampering preparation of a meal.

Code 1-Plumbing

1. Hot water heater failure.
2. Leaking water supply pipes.

Code 2-Plumbing

1. Flush valves not operating properly.
2. Fixture drain, supply line to commode, or any water pipe leaking.
3. Commode leaking at base.

Code 3 -Plumbing

Leaky faucets.

Code 3-Interior

1. Floors damaged.
2. Paint chipping or peeling.
3. Casework.

Code 1-Roof Leaks

Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks

Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)

No water to facility.

Code 2-Water (Hot)

No hot water in portion of building listed.

Code 3-All other work not listed above.

1.3.5 Warranty Tags

At the time of installation, each warranted item shall be tagged with a durable, oil and water resistant tag approved by the Contracting Officer. Each tag shall be attached with a copper wire and shall be sprayed with a silicone waterproof coating. The date of acceptance and the QC signature shall remain blank until project is accepted for beneficial occupancy. The tag shall show the following information.

- a. Type of product/material_____.
- b. Model number_____.
- c. Serial number_____.
- d. Contract number_____.
- e. Warranty period_____ from_____ to_____.
- f. Inspector's signature_____.
- g. Construction Contractor_____.
- Address_____.
- Telephone number_____.
- h. Warranty contact_____.
- Address_____.

Telephone number_____.

i. Warranty response time priority code_____.

j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

1.4 MECHANICAL TESTING, ADJUSTING, BALANCING, AND COMMISSIONING

Prior to final inspection and transfer of the completed facility; all reports, statements, certificates, and completed checklists for testing, adjusting, balancing, and commissioning of mechanical systems shall be submitted to and approved by the Contracting Officer as specified in applicable technical specification sections.

1.5 OPERATION AND MAINTENANCE MANUALS

Operation manuals and maintenance manuals shall be submitted as specified. Operation manuals and maintenance manuals provided in a common volume shall be clearly differentiated and shall be separately indexed.

1.6 FINAL CLEANING

The premises shall be left broom clean. Stains, foreign substances, and temporary labels shall be removed from surfaces. Carpet and soft surfaces shall be vacuumed. Equipment and fixtures shall be cleaned to a sanitary condition. Filters of operating equipment shall be cleaned. Debris shall be removed from roofs, drainage systems, gutters, and downspouts. Paved areas shall be swept and landscaped areas shall be raked clean. The site shall have waste, surplus materials, and rubbish removed. The project area shall have temporary structures, barricades, project signs, and construction facilities removed. A list of completed clean-up items shall be submitted on the day of final inspection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --